1965-1966

The Citadel

The Military College of South Carolina

Charleston, S. C.

CATALOGUE ISSUE

BULLETIN OF

THE CITADEL

THE MILITARY COLLEGE
OF SOUTH CAROLINA

FOUNDED 1842

CATALOGUE ISSUE

1965–1966

CHARLESTON, S. C.

"I call, therefore, a complete and generous education that which fits a man to perform justly, skillfully, and magnanimously all the offices, both private and public, of peace and war."—MILTON.

GENERAL MARK WAYNE CLARK

PRESIDENT

GENERAL HUGH PATE HARRIS

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COLLEGE CALENDAR FOR 1965-66

1 9 6 5

SUMMER SCHOOL

June 14, Monday 8:00 a.m.	First half session begins
July 23, Friday	First half session ends
July 26, Monday 8:00 a.m.	Second half session begins
August 27, Friday	Second half session ends

FIRST SEMESTER

September 7, Tuesday 9:00 a.m.	New Cadets report
September 14, Tuesday noon	Old Cadets report
September 15, Wednesday 8:00 a.m.	Registration
September 16, Thursday	Classes begin
November 6, Saturday	Parents' Day
November 20, Saturday	Homecoming
November 25, Thursday	Thanksgiving
December 17, Friday noon	Christmas Holidays begin

1 9 6 6

January 3, Monday 6:00 p.m.	Christmas Holidays end
January 20 to January 27	Examinations
January 28, Friday	First Semester ends

SECOND SEMESTER

January 31, Monday 8:00 a.m.	Registration
February 1, Tuesday	Classes begin
February 22, Tuesday	Washington's Birthday
March 19, Saturday	Corps Day
April 6, Wednesday noon	Easter Holidays begin
April 12, Tuesday 6:00 p.m.	Easter Holidays end
May 18 to May 25	Examinations
May 28, Saturday	Commencement

Summer School June - June 13 July 2/2
July 25 - Aug 26

LESESNE GATE

THE PURPOSE OF MILITARY TRAINING AT THE CITADEL

The Citadel is a liberal arts military college. The college is justly proud of the war records of its sons and will always expect them to respond in national emergencies, but its chief purpose is to prepare men for civil pursuits by giving them a sound education reinforced by the best features of military training.

Military training teaches the value of a methodical and orderly approach to tasks, of physical and mental fitness, and of alertness and self-confidence. It teaches how to command and how to obey, how to organize and coordinate, and how to maintain morale and discipline. Most important of all, it instills the conviction that any sacrifice must be made when principle is involved, and that truth, honor, and integrity are the bases of character.

The training is not given at the expense of academic education. On the contrary, the aim is to make academic training effective through development of the soldierly virtues. Graduates in many vocations and in many parts of the world attest the value of the rigorous regimen of the classroom, barracks, and drill field.

Many desirable characteristics do not grow out of scholarship alone. Traditions and codes may more profoundly influence college men than the most scholarly lectures. For this reason, to its academic training, which it assiduously seeks to make vital, The Citadel adds the code of the cadet and gentleman. The visible symbol of this code is the proudly-worn uniform, a constant reminder that the alma mater expects of every son the poise and culture of a student, the public spirit and unselfishness of an enlightened citizen, the courage and loyalty of a soldier, and the honor and bearing of a gentleman.

ORGANIZATION

BOARD OF VISITORS

Colonel David E. McCuen, Jr., *Chairman,* '35 (1970)....Greenville, S. C.
(P. O. Box 636)

Colonel W. W. Wannamaker, Jr., '19 (1968) ..... Orangeburg, S. C.
(P. O. Box 542)

Colonel J. M. Holliday, '36 (1966) ..... Galivants Ferry, S. C.

Colonel Eugene C. Figg, '28 (1970) ..... Charleston, S. C.
(24 Savage St.)

Colonel Thomas C. Vandiver, '29 (1965) ..... Greenville, S. C.
(P. O. Box 456)

Colonel Charles A. Laffitte, '29 (1966) ..... Allendale, S. C.

Colonel Henry Deas, Jr., '38 (1965) ..... Charleston, S. C.
(70 Murray Blvd.)

General E. A. Pollock, USMC Ret., '21 (1967) ..... Beaufort, S. C.
(P. O. Box 861)

Brig. General Larkin H. Jennings, Jr., '33 (1969) ..... Union, S. C.
(107 Circle Dr.)

Ex Officio

His Excellency Donald S. Russell, Governor ..... Columbia, S. C.

Major General Frank D. Pinckney, Adjutant General..Columbia, S. C.

The Honorable Jesse T. Anderson, State Superintendent
of Education ..... Columbia, S. C.

The Honorable W. Clyde Graham, Chairman, Military
Committee, State Senate ..... Pamplico, S. C.

The Honorable Robert W. Turner, Chairman, Military
Committee, House of Representatives ..... North Charleston, S. C.
(501 Parkside Drive)

Colonel S. M. Sanders, U.S.A.R., *Secretary,* '20 .... Charleston, S. C.
(Room 409, The Center)

General Mark Wayne Clark, USA, Ret. ..... *President*
Maj. Gen. Reuben H. Tucker, III, USA, Ret. .... *Commandant of Cadets*
Brig. General James W. Duckett ..... *Dean of the College*
Colonel Ralph Milledge Byrd ..... *Academic Dean*
Colonel D. S. McAlister ..... *Dean of Cadet Affairs*
Colonel C. J. Hoy, USA, Ret. ..... *Adjutant*
Colonel Philip R. Garges, USA, Ret. ..... *Staff Engineer*
Colonel J. F. Bosch, Jr. ..... *Quartermaster*
Colonel Sidney R. Crumpton, USA, Ret. ..... *Chaplain*
Colonel Samuel H. Sandifer, M. D. ..... *Surgeon*
Lieutenant Colonel G. Kenneth Webb, USA ..... *Deputy Commandant*
Lieutenant Colonel F. W. Taylor, Jr., USAF ..... *Deputy Commandant*
Lieutenant Colonel Edward L. Teague, Jr. ..... *Director of Athletics*
Lieutenant Colonel D. D. Nicholson, Jr., USMC, Ret. ..... *Public Relations Officer*
Commander Robert B. Folsom, USNR ..... *Registrar and Director of Admissions*
Lieutenant Colonel James M. Hillard ..... *Librarian*

Administrative Staff Assistants

Colonel J. F. Williams, USA, Ret. ..... *Assistant Commandant*
Lieutenant Colonel T. N. Courvoisie, USA, Ret. .. *Asst. Commandant*
Lieutenant Colonel John Amaker, USA, Ret. ..... *Postmaster*
Lieutenant Colonel Hugo A. Pearce, Jr. ..... Alumni Secretary
Lieutenant Commander Joseph Z. Powell, Jr. .... *Assistant Quartermaster*
Major Harvey F. Brand .... *Canteen Manager & Asst. Dir. Cadet Affairs*
Major D. C. Bunch ..... *Tennis Coach*
Major Leon Freda, USMC, Ret. ..... *Band Director*
Captain D. C. H. Witt, Jr. ..... *Assistant Football Coach*
Captain Jerry C. Whitmire ..... *Rifle Coach*
Captain P. G. Ratterree ..... *Assistant Football Coach*
Captain William M. Bostwick ..... *Trainer*
Captain Henry M. Read ..... *Assistant Director of Athletics*
Captain James H. Dorton ..... *Mess Steward*
First Lieutenant Melvin K. Thompson ..... *Basketball Coach*
First Lieutenant Jack R. Hall .... *Track and Assistant Football Coach*
First Lieutenant George M. Rariden ..... *Golf Coach*
First Lieutenant Paul M. Brandenburg ..... *Assistant Basketball Coach*
First Lieutenant George R. Wenzell ..... *Sports Publicity Director*
First Lieutenant Chalmers M. Port .... *Baseball and Asst. Football Coach*
Second Lieutenant Jerry A. Nettles ..... *Assistant Football Coach*
Second Lieutenant Janson L. Cox ..... *Acting Curator of Museum*
Second Lieutenant David J. Fagg .... *Wrestling and Asst. Football Coach*
Second Lieutenant Lawrence H. Seithel ..... *Assistant Quartermaster*
Mr. Vernon W. Weston ..... *Director of Music*
The Reverend F. J. Hopwood ..... *Roman Catholic Chaplain*
Mr. Ronald Reilly ..... *Swimming Coach*
Miss Susan Burk ..... *Administrative Assistant*
Mrs. M. J. Reynolds ..... *Administrative Assistant*
Mrs. J. H. Williams ..... *Administrative Assistant*
Mrs. A. E. Dufour ..... *Hostess*
Miss B. F. Moloney, RN ..... *Head Nurse*

FACULTY

General Mark Wayne Clark, U.S.A., Retired
B.S., United States Military Academy; Dr. Pol. Science, Universities of Naples and Vienna; D.C.L., Oxford; D. Sc., University of Florence; LL.D., Oberlin College, Pennsylvania Military College, Universities of Southern California, San Francisco, South Carolina, Akron, and Loyola; Litt. D., Clemson College.
President

Major General Reuben Henry Tucker, III, U.S.A., Retired
B.S., United States Military Academy
Commandant of Cadets

Brigadier General James William Duckett
B.S., The Citadel; M.S., University of Georgia; Ph.D., University of North Carolina
Dean of the College

Colonel Ralph Milledge Byrd
B.S., The Citadel; M.S., Ph.D., University of North Carolina
Academic Dean

Colonel Robert Waller Achurch
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Professor and Head, Department of English

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Professor and Head, Department of Business Administration

First Lieutenant Larry Holbrook Addington
A.B., M.A., University of North Carolina; Ph.D., Duke University
Assistant Professor of History

Captain David Henry Adrian
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Assistant Professor of Air Science

First Lieutenant Harold Brice Alexander
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Assistant Professor of English

*Major Norman Albert Allen, Jr.
B.S., College of William and Mary; M.S., University of Delaware
Assistant Professor of Physics

---

*—On leave of absence.

Colonel Wallace Ervin Anderson
B.S., The Citadel; M.S., University of Kentucky; Ph.D., University of Michigan
Professor and Head, Department of Physics

Lieutenant Colonel Charles Leroy Anger
B.S., M.S., Ph.D., University of Virginia
Professor and Head, Department of History

First Lieutenant Salvatore Alfred Arcilesi
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Major Jep Harmon Bailey
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Second Lieutenant Matthew Baird Barkley, Jr.
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Instructor in Physics

Captain James Edward Belton
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Lieutenant Colonel George Semmens Boase
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Captain William Maner Bostwick
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---

*—On leave of absence.

Major James Timothy Boyce
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Assistant Professor of Air Science

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*Major Chaford Acquilla Brown
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Assistant Professor of Mathematics

Captain Robert Samuel Brown
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Assistant Professor of Modern Languages

Captain James Albert Browning
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Major Donald Cleveland Bunch
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Assistant Professor of Business Administration

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First Lieutenant Arthur Nicholas Corontzes
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Assistant Professor of Business Administration

First Lieutenant Walter Bland Mathis, Jr.
A.B., The Citadel; M.A., Harvard University
Assistant Professor of English

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*—On leave of absence.

Captain Clinton Amos Medbery, Jr.
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Assistant Professor of Chemistry

Colonel John Abner Meeks, U.S.A., Retired
B.S., United States Military Academy; M.S., Massachusetts Institute of Technology
Assistant Professor of Physics

Captain Robert Edwin Mellard
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Associate Professor of Civil Engineering

Colonel Isaac Stevens Halstead Metcalf
A.B., Oberlin College; M.A., Columbia University; Ph.D., Western Reserve University
Professor of Biology and Chemistry

Lieutenant Colonel John Charles Mettler
A.B., Washburn College; M.A., Rutgers University; Ph.D., Clark University
Professor of Business Administration

Major Lewis Blake Middleton
B.S., Clemson College; R.A., (South Carolina and Mississippi)
Assistant Professor of Civil Engineering

Second Lieutenant Laurence Wayne Moreland
B.A., Southern Methodist University
Assistant Professor of Political Science

Major John Allen Morris
A.B., College of Charleston; M.A., University of North Carolina
Assistant Professor of English

Captain Charles Franklin Mulkey
A.B., M.A., George Peabody College for Teachers
Assistant Professor of English

Major John Charles Myers
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Professor of Civil Engineering

Second Lieutenant Herbert Thomas Nath
B.S., Indiana State College in Pennsylvania; M.S. in L.S., Drexel Institute of Technology
Assistant Professor, Reference Librarian

Second Lieutenant Jerry Allen Nettles
B.S., The Citadel
Instructor in Physical Education

Second Lieutenant Lawrence Heath Neville, USAR
A.B., The Citadel
Instructor in English

Second Lieutenant Freddie Alvie Oshel, Jr.
B.S., M.S., Central Missouri State College
Assistant Professor of Physical Education

Captain Luke Theodore Pappas
B.S., Morris Harvey College; M.A., Louisiana State University
Assistant Professor of Modern Languages

Captain Mercer Howell Patterson
B.S., United States Military Academy
Assistant Professor of Military Science

Captain Hugh Owens Peurifoy
B.A., The Citadel; M.A., University of Denver
Assistant Professor of English

Lieutenant Colonel Edward Hamilton Phillips
A.B., University of Virginia; M.A., Ph.D., University of North Carolina
Professor of History

First Lieutenant Joseph Donald Phillips
B.S., M.S., Georgia Institute of Technology
Assistant Professor of Business Administration

Captain John Harmann Pieper, III, USAFR
A.B., The Citadel
Instructor in Modern Languages

First Lieutenant Chalmers Marshall Port
B.A., University of North Carolina; M.Ed., Pennsylvania State University
Assistant Professor of Physical Education

First Lieutenant George Manton Rariden, Jr.
B.S., M.P.H., University of Florida
Assistant Professor of Physical Education

Captain Pride Graham Ratterree
B.S., Wake Forest College; M.A., Appalachian State Teachers College
Assistant Professor of Physical Education

Lieutenant Colonel Claude Holt Rawlins
B.S., B.A., Eastern Kentucky State College
Associate Professor of Military Science

Colonel George Everett Reves
B.S., Millsaps College; M.A., Vanderbilt University; Ph.D., University of Cincinnati
Professor of Mathematics

Captain Samuel Loy Robison, Jr.
B.S. in C.E., M.S. in Sanitary Engineering, Virginia Polytechnic Institute
Assistant Professor of Civil Engineering

Captain Emery Roughton, USN, Retired
B.S., United States Naval Academy; M.A.T., Duke University
Assistant Professor of Mathematics

Captain Jasper Lyles Rutland
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Assistant Professor of Civil Engineering

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Assistant Professor of Military Science

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Assistant Professor of History

Captain Frank Jay Simmons
B.A., The Citadel
Assistant Professor of Military Science

Major Robert Lewis Smith
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Associate Professor of Modern Languages

Captain Charles Henry Sotire
B.S., The Citadel
Assistant Professor of Air Science

Second Lieutenant Harvey Melvin Spar
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Assistant Professor of Political Science

Captain Philip Brent Stockton
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Assistant Professor of Business Administration

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Assistant Professor of English

Lieutenant Colonel Charles Samuel Sutton
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Associate Professor of Mathematics

Lieutenant Colonel Franklin Woody Taylor
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Professor of Air Science

Lieutenant Colonel Edward Lindell Teague, Jr.
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Associate Professor of Physical Education

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Assistant Professor of Military Science

First Lieutenant Melvin Keith Thompson
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Assistant Professor of Physical Education

Major Russell Emery Thompson
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Assistant Professor of Business Administration

Colonel Frank Cambridge Tibbetts
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Professor of Business Administration

Captain James Anderson Timmerman, Jr.
B.S., M.S., Clemson College; Ph.D., Auburn University
Associate Professor of Biology

Lieutenant Colonel Karl Herbert Van D'Elden, U.S.A., Retired
A.B., Pennsylvania State College; A.M., Harvard University; Ph.D., Western Reserve University
Professor and Head, Department of Modern Languages

Lieutenant Colonel Nelson Van de Luyster
B.A., Western State College; M.A., University of Michigan; Ph.D., University of North Carolina
Professor of Modern Languages

Lieutenant Colonel Francis Eugene Voegeli, U.S.A., Retired
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Assistant Professor of Physics

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Assistant Professor of Chemistry and Geology

Major John Duke Ward
B.S., United States Military Academy
Assistant Professor of Air Science

Lieutenant Colonel VanCleave Parrott Warren, U.S.A., Retired
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Assistant Professor of Modern Languages

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Lieutenant Colonel George Kenneth Webb
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Professor of Military Science

Captain Arthur Francis Weickhardt
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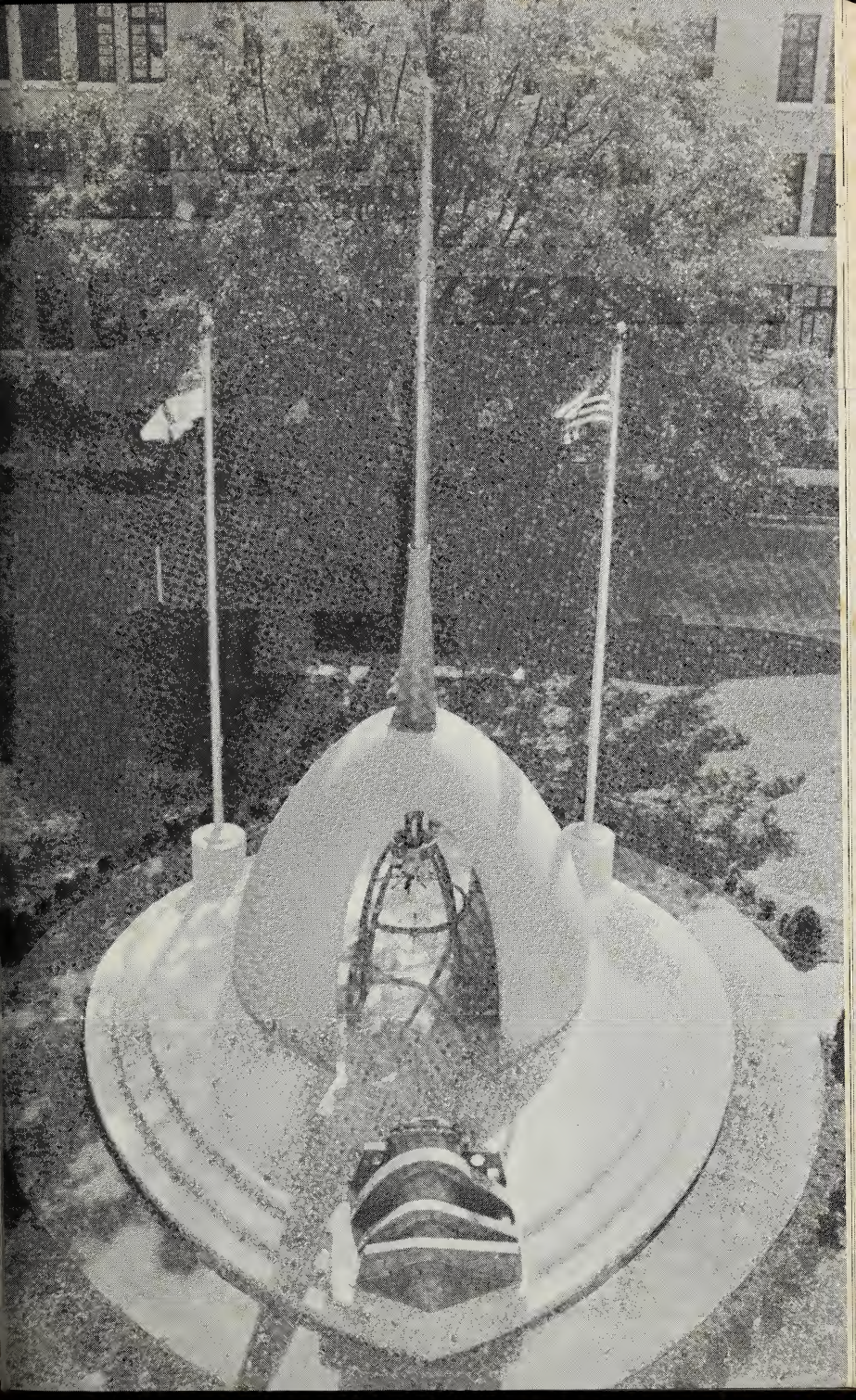


The Old Location and the New

The history of The Citadel may be divided into two parts. In the first, extending from December 20, 1842, when the legislature of South Carolina passed an act providing for the establishment of the college, to September, 1922, the institution was located on Marion Square. This is an open space of about ten acres in what has long been the middle of the historic city of Charleston. In the second, extending from 1922 to the present, The Citadel has been situated some three miles northwest of its former location on a beautiful campus of about one hundred acres between Hampton Park and the Ashley River.

The Origin of the Name

The Citadel derived its name from the building in which it was first housed. Erected with state funds as an arsenal some years after the frustration of the Denmark Vesey slave uprising of 1822, this sturdy old fortress, which still dominates Marion Square, was called The Citadel. It was garrisoned first by Federal, then by state troops until they were replaced in March, 1843, by the twenty students who made up the first Corps of Cadets. Living under regulations much like those of West Point, these cadets served as guards for the state's arms as they pursued a course of study designed to make them useful citizens in time of peace as well as war.

With its sister school, The Arsenal, established at the same time in Columbia, the state capital, The Citadel was a part of what came to be known as the South Carolina Military Academy. In 1845 regulations governing the South Carolina Military Academy subordinated The Arsenal to The Citadel and thereafter The Arsenal trained only freshmen. The Arsenal burned in 1865 and was never reopened.

The first period of the college's existence on Marion Square lasted until 1865. During this period an east and a west wing were added to the original building, high standards of intellectual accomplishment and military discipline were maintained, and enrollment was built up to 145 cadets by January 1, 1864.

The Citadel in the Civil War

The founders—men like Governors Richardson and Hammond and General D. F. Jamison, who was later to preside over the convention at which the South Carolina Ordinance of Secession was signed—had foreseen that the state might soon need men with military training. When the trouble long brewing between the North and the South erupted in war, the record of Citadel alumni and cadets vindicated the foresight of the founders. Of the 224 alumni living at the time of the Civil War, 193 wore the Confederate grey, all but twenty as commissioned officers and four as generals. Thirty-nine were killed in battle, and four died in the service. On January 9, 1861—before the firing on Fort Sumter—cadets of the Corps manned the guns which

drove back from the entrance of Charleston harbor the *Star of the West,* a steamer sent by the Federal government to relieve the fort. Made a part of the military organization of the state by legislative act of January 28, 1861, the Corps of Cadets helped emplace and guard artillery on James Island, did guard duty in Charleston, and on December 6-9, 1864, near the war's end, suffered several casualties in an engagement with Union troops at Tulifinny Creek near Yemassee Station, while helping to defend the Charleston and Savannah Railroad.

Very shortly afterwards came years of eclipse for The Citadel. From February 18, 1865, when a Union force marched into Charleston, until April, 1879, the buildings on Marion Square were occupied by Federal troops, and the operation of the college was necessarily suspended.

The Reopening after the Civil War

The second period of The Citadel's existence on Marion Square began on October 2, 1882, with an enrollment of 185 cadets. Though the Corps no longer served as arsenal guard, the military system of the ante-bellum years was in all other respects continued. The reopening of the college was the culmination of efforts begun by alumni in April, 1877. At their request Governor Hampton appointed a Board of Visitors in 1878, and in January, 1882, the state legislature passed a bill providing for the re-establishment of the college and appropriating money for the repair of its buildings and for its maintenance.

In the forty years that passed before The Citadel moved to its present site, the physical plant was still further enlarged, part of the cost being defrayed with money collected in 1888 from the Federal government for rent and for damages sustained during the years the buildings were occupied by Federal troops. The enrollment was increased, and the curriculum was made somewhat more flexible. In 1910 the name of the college was changed to The Citadel, The Military College of South Carolina.

In 1918, during the administration of Mayor T. T. Hyde, the City Council of Charleston offered the state the present site of the college—a tract of about eighty acres of high land and a hundred acres of salt marsh. Early in 1919, the State Legislature accepted the offer and appropriated money for the erection of the first buildings.

The Greater Citadel

In the fall of 1922 the college began operating at its new location. There were then only a few buildings on the campus. In the years that have elapsed many have been added to those originally constructed (See Grounds and Buildings, page 33, for a complete description of the present campus), and enough salt marsh has been reclaimed to give the college a campus of more than one hundred acres.

Changes in the curriculum and in the nature of the student body have paralleled those in the physical plant. In the first place, the

elective system has been considerably expanded. In the last year at the old location it was possible for a student to major in only three fields during his junior and senior years: chemistry, civil engineering, and physics. In his senior year the student was then able to major in one of two others: biology-chemistry and English. Now students may choose among the following, all of which offer major work for at least the junior and senior years: business administration, chemistry, civil engineering, electrical engineering, English, history, mathematics, modern languages, physical education, physics, and political science. In addition, premedical and predental courses are now available as are courses in Greek, Latin, education, psychology, sociology, and the appreciation of art and music.

The Student Body

In the nature of the student body there have been significant changes. One is that it has grown much larger. In 1921-1922 there were fewer than 300 cadets in the Corps; in 1947-48, when the student body was the largest the college ever had, there were 2,271 students enrolled including cadets and veterans. Nearly 3,500 veterans of the Second World War and the Korean Conflict, most of whom were civilian students, attended the college under Public Law 396, popularly known as the G. I. Bill. The program for veterans ended with the opening of college in September, 1960. All students are now members of the Corps of Cadets. Since June 20, 1950, women have been admitted as students, although only to summer sessions.

The growth of the Corps is further reflected in the fact that, while there were 700 Citadel graduates and ex-cadets in the armed forces in World War I, there were about 6,000 alumni and ex-cadets on active service in World War II. Of these, 280 died for their country. Some 1,500 were on active duty during the Korean Conflict, 450 of whom were in combat and 26 of whom gave their lives. Virtually all graduates on active duty have been commissioned officers.

Memorials to the Makers

Persons prominent in the history of The Citadel are memorialized in campus structures. For example, the largest barracks is named for Colonel James Padgett, member of the Board of Visitors for many years, and Colonel J. P. Thomas, its longtime chairman. The other barracks are named for Andrew B. Murray, philanthropist whose generosity made possible the construction of a barracks and several other buildings; Major General Evander M. Law, C.S.A., Citadel 1856, educator; and Major P. F. Stevens, Citadel 1849, superintendent from 1859 to 1861. The dining hall is named for Colonel Asbury Coward, Citadel 1854, superintendent from 1890 to 1908; the liberal arts classroom building for Brigadier General Ellison Capers, C.S.A., Citadel 1857, Episcopal Bishop of South Carolina and chancellor of the University of the South, Sewanee, and Major F. W. Capers, superintendent

from 1852 to 1859; the military science building for Brigadier General Micah Jenkins, C.S.A., Citadel 1854, founder of King's Mountain Military School; the physical education building for Hugh S. Thompson, Citadel 1856, twice Governor of South Carolina 1882-1884, Assistant Secretary of the U. S. Treasury 1886, and commissioner of the U. S. Civil Service 1890; the stadium, acquired by the college in 1963 and seating 22,500 spectators, for Brigadier General Johnson Hagood, C.S.A., first honor graduate, Class of 1847, Governor of South Carolina, 1880-1882, and chairman of the Board at the time the college was re-established after the Civil War; LeTellier Hall, for Colonel L. S. LeTellier, for many years head of the Department of Civil Engineering and later acting president of the college; the largest academic building, for Colonel O. J. Bond, president from 1908 to 1931; the chapel, for General Charles P. Summerall, former Chief of Staff of the United States Army, Citadel president from 1931 to 1953; and the new activities building for General Mark Wayne Clark, currently president of The Citadel.

Good Signs for the Future

In recent years The Citadel has received three of the most generous gifts ever made to the college.

The first gift, public announcement of which was made on August 31, 1953, was the bequest by Joseph D. Aiken, of Charleston, South Carolina, of $750,000. The other two gifts, both made by United States Senator Charles E. Daniel, of Greenville, South Carolina, and his brother, Mr. R. Hugh Daniel, of Birmingham, Alabama, were the Thomas Dry Howie Memorial Carillon and the sum of $50,000 for scholarships. The scholarship gift was announced on October 9, 1954. On December 5, 1954, the Carillon was dedicated to the memory of Major Howie, of the class of 1929, who died heroically in the fighting at St. Lo, France, on July 17, 1944. (See Grounds and Buildings, page 34 for description of the Carillon.)

General Clark, a distinguished soldier who followed General Summerall as president, commanded the U. S. Fifth Army in Italy and the United Nations forces in Korea, and has been president of The Citadel since March 19, 1954. Under his leadership the enrollment has steadily increased until the maximum barracks capacity of 2,000 cadets was reached in 1957. Since then enrollment has remained at 2,000. Admission requirements and academic standards have continually improved under a program of selectivity.

Named to succeed General Clark upon his retirement on July 1, 1965, was General Hugh Pate Harris. The third four-star retired Army general to be president of The Citadel, General Harris served in many significant combat, administrative, and educational positions while on active duty. The highly-decorated general's last assignment before coming to The Citadel was as Commanding General, U. S. Continental Army Command, with headquarters at Fort Monroe, Virginia.

Location

The Citadel is located on a one-hundred-acre campus in the northwestern part of the city of Charleston. The view to the west and south across the Ashley River, which skirts the campus, is typical of the Carolina Low Country scenery. From the east, the campus is entered through Hampton Park, a show-place of flowers, trees, terraces, and sunken gardens. From the north and south, the entrances are through residential areas of the city.

Buildings

The buildings, both in design and location, follow the carefully prepared plan of the original architects. Architecturally, the buildings follow the Spanish-Moorish style of the original campus in the heart of the city. All major structures, such as barracks, academic and administrative buildings, chapel, armory, student activities building, and library-museum, border the large parade ground, which forms the center of the campus.

Bond Hall

Bond Hall, the main building on the campus, contains in the central part the administrative offices of the college, and the offices of the Association of Citadel Men. In the large wings are academic departments, laboratories, and classrooms of Chemistry, Physics, Electrical Engineering, Business Administration, and Education.

Capers Hall

Capers Hall is a classroom building housing the Departments of English, History, Mathematics, Modern Languages, and Political Science.

LeTellier Building

LeTellier Hall contains the Department of Civil Engineering with its classrooms, laboratories and library.

Jenkins Hall

This building was formally dedicated in May, 1964, and contains offices for the Commandant, his staff, and the faculty of the Military and Aerospace Studies Departments who teach the Army and Air Force Reserve Officer Training Corps Programs. The building also contains storage areas for weapons and military supplies, a lecture room with a capacity of 250, and ten classrooms, each with a capacity of 45. Also included is the Board of Visitors room.

The Armory

The Armory is used for indoor drills, athletic contests, dances, and other activities and functions at which large crowds are assembled. The main area has a floor surface of thirty thousand square feet, and a ceiling clearance of sixty-five feet. The steel balconies will seat approximately 2,400 spectators.

An annex at the rear of the Armory contains the swimming pool, with pressure filters and sterilizing and heating apparatus to assure cleanliness and to provide year-round use.

The Chapel and Carillon

The General Charles Pelot Summerall Chapel, on the east side of the campus, faces the row of barracks which forms the western boundary of the parade ground. The cathedral-like proportions of the Chapel with its fine pipe organ and splendid memorial windows of stained glass create an atmosphere of religious piety befitting its purpose.

To the north of the Chapel is the Major Tom Howie Carillon, a gift of two Citadel alumni, the late Senator Charles E. Daniel and his brother, Mr. R. Hugh Daniel, in memory of the famous "Major of St. Lo," a classmate of the donors.

Barracks

The four dormitories, or barracks, of brick and concrete construction, are rectangular with paved interior courts enclosed by galleries. Rooms accommodate two or more cadets and are equipped with hot and cold water.

Coward Hall

Conveniently located behind the barracks is the cadet dining hall, with a seating capacity of two thousand. Constructed of concrete and tile, this building is fully equipped with modern facilities for storing, preparing, and serving food. Dining-room floors are terrazzo; the kitchen floors are of quarry tile, and all wainscots of glazed brick, so that sanitation is easily maintained. New and up-to-date equipment is installed in the kitchen, and the three dining rooms and the steward's offices are air conditioned.

The Mary Bennett Murray Hospital

The college infirmary conforms with the most modern standards of equipment and personnel. The college surgeon is aided by a head nurse and her assistants.

Alumni Hall

This building is used for sports and recreational activities. On the ground floor are athletic lockers, showers, and equipment rooms. There is a gymnasium on the second floor.

Thompson Hall

This building contains the Physical Education offices and classrooms as well as a drafting room and two classrooms of the Civil Engineering Department. It also has athletic, dressing and shower rooms and facilities for housing visiting varsity teams.

Mark Clark Hall

This million-dollar student activities building has on the first floor a large central lobby, on one side of which is a well-appointed re-

ception room and on the other side and rear, a post office, canteen, barber shop, billiard room, and bowling room of six alleys. On the second floor an auditorium with a seating capacity of one thousand can be used for dances and other large gatherings. The cadet store, television room, game rooms, large club room with kitchen facilities, and offices of the Dean of Cadet Affairs are also on the second floor. On the third floor are a court room for the Cadet Honor Committee, three conference rooms, a dark room for camera hobbyists, and editorial rooms for campus publications. Apartments for distinguished guests of The Citadel are also on this floor.

Memorial Library

The Citadel Memorial Library was dedicated on June 2, 1960, to the memory of The Citadel men of all wars who gave their lives for their country. This building combines the best features of efficient, and aesthetic library planning. It provides an excellent location for the student not only to study for his classroom work, but also to familiarize himself with the literature which will give him an appreciation of reading as a part of his cultural heritage.

Every effort has been taken to make this building not only an educational bulwark but a place of inspiration as well. This inspirational program includes eight murals depicting the history of The Citadel and epitomizes the part that The Citadel and her sons have played in the life of the state and the nation. There is also a President's Room which features portraits of the superintendents and presidents of The Citadel. The Gallery of Distinguished Alumni honors those alumni who have made outstanding contributions to mankind. Also in the library is the Rare Book Room, which combines elegance and practical planning to provide safe housing for valuable items in a place of beauty. In this room are gathered all books dealing with The Citadel and its history.

Because books must be an integral part of the educational process, the main collection of over 90,000 books, bound periodicals, documents, and pamphlets is easily accessible to all students in the open-stock arrangement. These, combined with the books found in the Reference Room, provide an excellent basis upon which the student may base his education. Each year more than 5,000 volumes are added to this already excellent collection.

In addition, the library subscribes to more than 500 current periodicals and to newspapers from the principal cities of South Carolina and the nation. Most of this valuable research material is preserved for future use by either microfilming or binding. The library has the latest equipment for the reading of all types of microprint publications.

In addition to the books in the main collection of the library there are also collections of technical books in the departmental libraries

for the Chemistry and Civil Engineering Departments. All books on the campus are catalogued and included in the catalogue of the main library.

The building, exclusive of the lounge area seating, will seat 450 students. In addition, provision has been made for seminar and conference rooms for both faculty and cadets. Built to shelve 250,000 volumes, this library will be adequate for many years and will provide space for an excellent college collection.

Museum

The Citadel Memorial Military Museum, occupying the third floor of the Library-Museum building, provides a setting in which objects and articles related to the school's proud history can be preserved and displayed. The museum also provides a program of changing exhibits to supplement and support the academic program.

Included in the long-range museum program are plans for a well-rounded collection which will feature a complete series of Citadel uniforms from the time of the school's founding to the present, a representative collection of American military uniforms, including those of the Confederacy, a representative collection of American military weapons, and a collection of pictures and documents recording every aspect of Citadel history. Success of the museum program depends to a great extent upon the support of alumni and friends of The Citadel.

Begun in 1956 as a cadet activity, it has achieved its present status as a result of continuing efforts by cadet volunteers and the enthusiastic support of The Citadel President, General Mark W. Clark.

Much of the responsibility for the operation of the Museum rests with members of the Cadet Museum Committee who assist, under the supervision of the Museum Director, in such important operations as cataloguing the collection, historical research, exhibit construction, and cleaning and preservation of articles in the collection.

As its collection grows and its permanent exhibits are constructed, the Museum will play an increasingly important role as guardian of The Citadel's proud heritage.

The Seraph Monument

H.M.S. *Seraph,* the submarine memorialized in the *Seraph* Monument which was dedicated at The Citadel on November 2, 1963, has a uniquely distinguished record, and many of her most fascinating exploits involved Americans. Embodied in this memorial are the *Seraph's* fore hatch, steering and plane wheels, her ship's bell and badge, and her periscope.

Seraph is best remembered for her role in the secret entry into North Africa of Gen. Mark W. Clark when he headed a spy team which made a clandestine rendezvous with Free French leaders there

in the critical days of 1942 immediately prior to Allied landings on the North African coast.

During the same year this submarine successfully accomplished another secret mission that mystified the German enemy. In this episode she was the vessel that permitted French Gen. Henri H. Giraud to elude the Germans who had surrounded him in Southern France and to escape to aid the Allied cause. Since Giraud was at odds with the British, he insisted that he would make his escape only on an American submarine. No such vessel was then in the Mediterranean, so an American Naval officer was placed in technical command of the *Seraph*. For a time she had two captains and operated under two flags, the American and Royal Navy Ensigns which fly above the monument to commemorate this unusual co-operation between two nations.

Among the *Seraph's* many other historic missions was a gigantic ruse which saved thousands of Allied soldiers' lives in World War II. A book entitled *The Man Who Never Was* describes this adventure, and a motion picture was based on the book. Another book, *The Ship That Had Two Captains,* deals primarily with the Giraud adventure.

Utilities

The steam plant, laundry, machine shop, carpenter shop, paint shop, electric shop, warehouse, grounds shop, vehicle repair shop, and utility yard are inconspicuously grouped in the northwest corner of the campus. The tailor shop and the print shop are located at the rear of Padgett-Thomas Barracks.

Boating Facilities

Located on the east bank of the Ashley River, The Citadel has taken advantage of the splendid opportunities offered by the Charleston harbor and the local rivers for an almost year-round program of boating activities and water sports. The Citadel Yacht Basin has piers, slips, a floating dock for mooring boats, and power equipment for lowering and raising small craft into and out of the basin. A marine railway, hoist, boat shed, and locker and tool room provide ample facilities for the care and maintenance of boats owned by cadets and those provided by the college, which include a fleet of Lightning Class sailboats, outboards, and other types of watercraft. Of particular pride to the college is the fifty-foot motor cruiser *South Wind* and the sixty-five-foot yacht *Panchara*. All boating activities are under the auspices of the Yacht Club and are supervised by an experienced director.

GENERAL INFORMATION

Educational Standing

The Citadel is a fully accredited senior college. It is a member of the Southern Association of Colleges and Secondary Schools and is on the approved list of the Association of American Universities.

The Civil Engineering Department is accredited by the Engineers' Council for Professional Development. The Department of Chemistry is accredited by the American Chemical Society.

Reserve Officers Training Corps

The Citadel is justly proud of the record of its Reserve Officers Training Corps (ROTC). For more than twenty years, it has had the highest rating by the Department of Defense (prior to 1947, the Department of War.)

The courses of study in ROTC are those prescribed by the Department of Defense.

New students have a choice of Army or Air Force ROTC. AFROTC first classmen (seniors) who are qualified and who elect to receive pilot training after graduation are required to fly in the light aircraft training program at The Citadel and will, upon graduation, serve for a minimum of five years active duty.

Army ROTC graduates receiving reserve commissions serve either two years or six months (legislature pending on six months service) on active duty in the Army depending on the needs of the service. Selected qualified Army ROTC first classmen (seniors) may participate in the light aircraft pilot training program and will, upon graduation, receive a three-year active duty tour in the Army.

Further counseling is given new cadets in this subject before they make their final choice.

Selective Service

Cadets accepted for formal enrollment in Army or Air Force ROTC are, by special provisions of law, exempted from registering for Selective Service. (Requirements for formal enrollment are listed under Department of Military Science and Department of Aerospace Studies.) Those cadets who have already registered with the Selective Service and are formally enrolled in The Citadel ROTC program are exempt from induction by such enrollment, and the Military Science and Aerospace Studies Departments will notify draft boards of these exemptions. However, both conditions continue only so long as the cadet is formally enrolled and the Military Science aid Aerospace Studies Departments are obligated to inform local Draft Boards when such status changes.

Cadets of draft age (18 years or above) who fail to qualify for formal enrollment and/or who are removed from formal enrollment, are *responsible for registering* for Selective Service. The Citadel Regis-

trar will send Selective Service Form 109 to such cadet's Selective Service Board informing the Board of the cadet's Student Status.

Marine Corps Program

The Marine Corps offers commissions to a limited number of college students through the Platoon Leaders' Class Program. The general requirements for enrollment in this program are:

Be enrolled in college as a freshman, sophomore, or junior; be majoring in a field other than premedicine or predentistry; maintain at least a "C" average in college; be a citizen of the United States; and agree to serve on active duty for a minimum of three years.

Training is conducted during two six-week summer sessions at the Marine Corps Schools, Quantico, Virginia. Commissions are awarded upon graduation from college in either the ground or aviation components.

The Marine Corps Officer Selection Officer makes frequent visits to The Citadel during the school year to interview interested cadets.

U. S. Service Academies

Since The Citadel is not a preparatory school, it has no courses specifically designed to prepare students to enter the national military, naval, and air academies at West Point, Annapolis, and Colorado Springs.

Religious Influences

The Citadel is non-sectarian, but its high objectives cannot be achieved unless its educational program is founded on a solid religious life. Divorced from the spiritual aspirations of the individual and of the group, education is likely to destroy greater values than it creates. The basic purpose of education is to integrate its curricula with character-building activities and a normal religious life to the end that young people may be not only more efficient but better motivated by a sense of duty and obligation. Thus, in an atmosphere of tolerance and mutual respect, every cadet is encouraged to maintain his ties with the religious group to which such association may be made most fruitful.

It is significant that the college in planning its building program included a cadet chapel which in size, dignity, and beauty would be a fitting reminder to all cadets that education must be founded upon spiritual strength. This building, imposing and churchly, always accessible, is dedicated to no denomination or creed, but is a shrine of religion, of patriotism, and of remembrance in which any group of good will and seemly purpose may hold services and feel at home in doing so.

In keeping with the religious emphasis at The Citadel, a full-time chaplain is available to all cadets for counseling, guidance, and spiritual advice. Colonel Sidney R. Crumpton, retired Army chaplain, assumed his duties on February 1, 1962.

At nine o'clock each Sunday morning a general Protestant religious service is held in the Summerall Chapel, the Episcopal Service in Bond Hall, and the Jewish Service in Mark Clark Hall. At 7:40 a.m. Low Mass is observed for the Roman Catholic Cadets in the Chapel, Lutheran services and Greek Orthodox services are conducted in Mark Clark Hall.

Each Sunday evening at seven o'clock, a short but impressive Vesper Service is held in the Chapel for those desiring to attend. Five minute Morning Devotions are conducted by the cadets each morning, Monday through Friday at 7:45. Though the attendance is voluntary, the number attending is most gratifying.

Special services are held for Episcopalians on Ash Wednesday and Good Friday and the special early masses on holy days of obligation for Roman Catholics. During the Advent season, and shortly before the beginning of the Christmas furlough, a great carol service is held. Annually, parallel religious emphasis week programs are conducted under four auspices—those for Protestant cadets, the Newman Club for Roman Catholics, the Hillel Club for the members of the Jewish faith, and the Greek Club for the Orthodox group. These programs, led by outstanding speakers, are intended to bring into clearer relief a sense of the dignity and manliness of the religious life.

In all the services thus conducted and in the other influences which the college brings to bear on its cadets, the casual and perfunctory is avoided. Cadets are encouraged to regard contacts with their church as vital to their education and development, the act of worship as a deeply significant experience that should be accompanied by dignity, reverence and gratitude. Thus, on Sunday mornings one may view the impressive ceremony of battalions of cadets, each marching from their respective barracks across the drill field and converging on the chapel, and will sense no evidence of mere routine in their attitude. On the contrary, in this spectacle and in the service that follows, there is a fine manifestation of respect and reverence for this hour as the most significant of the entire week. The college realizes that these services, and the underlying religious life of which they are the outward manifestations, must be more than a mere gesture. Otherwise young men will find, as their intellectual horizons widen and they come into possession of the uncertain techniques of lay learning, that there is a temptation to abandon religious teaching as a guide and to substitute "reason" for faith as the ultimate guide. From this peril, education must protect itself by constantly reminding young people that education builds and enriches life not by abandoning religious faith as outmoded, but by accepting it as the source of truth and understanding.

The inscription on the front of the chapel is "Remember now thy Creator in the days of thy youth."

Religious Groups

For Episcopal cadets there is a student parish, "St. Alban's at The Citadel;" for Roman Catholic cadets, The Citadel Newman Foundation; and for each other group an appropriate club. These meet on Monday evenings for instruction by the chaplain or spiritual advisor, and social functions are planned in cooperation with civilian young people's groups of similar churches in Charleston. Denominational chaplains from the major religious faiths in Charleston act as spiritual advisors to the cadets of their groups. Every cadet is encouraged to participate in the Monday night denominational meetings, so that students may leave The Citadel stronger in their faith than before they entered.

The Citadel Religious Council

The purpose of the Religious Council is to direct the course of religious activities at The Citadel under the President and with the supervision of the College Chaplain. The planning and supervision of all the religious programs of the year come under the direction of this council.

THE HONOR SYSTEM

The honor system of, by, and for the Corps of Cadets came into being in September 1955. Since that time it has become an integral part of the training received by a cadet. The purpose of the honor system is to inculcate honor into each cadet so that he instinctively conducts himself in an honorable manner.

The guiding principle of the honor system is the Honor Code, which says simply "A cadet does not lie, cheat, or steal." These are three of the four violations, the fourth being failure to report a case of lying, cheating, or stealing.

The honor system is enforced by a Cadet Honor Committee made up of twenty-one members of the First Class who are elected by the three lower classes during the second semester of their Second Class year. The Honor Committee investigates all honor violations reported and conducts trials as necessary. Conviction by the Honor Court requires a unanimous secret vote of "guilty" by members of the court. In case a cadet is found guilty by the Honor Court and the President approves the findings of the court, he is permitted to resign from the college.

The Honor Committee keeps current and distributes an honor manual which describes the honor system and its workings in considerable detail.

DEPARTMENT OF THE COMMANDANT

General

The Commandant of Cadets commands the Corps of Cadets and controls the daily routine of duties. He grants leaves and other privileges provided by regulations and is charged with the maintenance of discipline over all students attending The Citadel. The department exercises supervision over barracks, controls the Officer in Charge and the cadet guard, and keeps the President of the College informed of matters pertaining to the conduct and discipline of the Corps of Cadets.

The Citadel is a military college, and it is therefore essential that a high standard of discipline be maintained. Through a system of merits and demerits, a record is kept of the conduct of each cadet. This record influences his military standing. Privileges of cadets who fail to respond to ordinary corrective measures are curtailed. Any cadet exceeding the allowed limit of demerits for the year will be dismissed.

By instruction and example cadets are taught to be neat in person and in uniform. Daily inspections of rooms insure cleanliness and good order. Through individual personal contacts and group meetings, cadets are encouraged to uphold the traditions of The Citadel and the standards of honor, integrity, and courtesy which are an outstanding mark of the cadet and gentleman.

System of Management

Leadership, initiative, and character are developed by placing upon cadets the stimulating responsibilities of command within the organization of the Corps of Cadets.

All cadets live in barracks. From reveille to taps, every hour of the cadet's time is accounted for. The regular habits of study and living thus formed, the attention to duty, obedience to authority, and love for order inculcated are considered among the most valuable features of the military education. While some of the graduates enter the military profession, hundreds in all walks of civil life attest to the high value of the training received at the institution.

The daily routine is regulated by the *Cadet Regulations,* generally known as "The Blue Book."

The Fourth Class System

The purpose of the Fourth Class System at The Citadel is to lay the foundation, early in a cadet's career, for the development of those qualities of character and discipline implied in the mission of The Citadel as a military college—to produce young men with alert minds and sound bodies who have been taught high ideals, honor, integrity, loyalty, and patriotism; who accept the responsibilities which accompany leadership; and who have sufficient professional knowledge to take their place in a competitive world.

These personal qualities must be deeply ingrained in the individual

so that neither time nor troubles will erase them from his personality. The system demands more than a letter-of-the-law compliance with the customs and traditions set down for the Fourth Classman's conduct. The tradition of The Citadel cannot be maintained by men who will do no more than is required of them. Self-discipline and self-evaluation develop men whose integrity and sense of duty cause them to serve selflessly beyond the prescribed limits of their tasks.

The Fourth Class System is both difficult and demanding. It represents an abrupt change from the life normally experienced in the home, and encompasses the entire period of a cadet's first year at The Citadel. It is administered impersonally, but at the same time exhibits the individual understanding necessary to effective leadership. It requires a full measure of mental preparedness and physical endurance.

The system by nature is arbitrary on the surface. It demands prompt and unquestioning obedience to authority through the use of a collection of customs and traditions. However, each of the elements or customs has a specific purpose of furthering a cadet's development.

The system is patterned after those used at our service academies and includes standing at a rigid position of attention (bracing), turning square corners when walking, undergoing neatness inspections before formation, learning various items of Fourth Class knowledge, working on approved company details such as minor chores incident to keeping their own area of barracks in order, and submitting to a variety of minor restrictions concerning the use of certain campus grounds and facilities, the wearing of the uniform, and the general conduct of a Fourth Classman.

Cadets who are unable to meet the desired standards or violate one or more of the customs are subject to corrective action. This can range from a verbal reprimand to walking tours on the quadrangle of barracks. Other disciplinary measures include restriction to limits of campus, confinement to rooms, undergoing special inspections, and participating in special constructive physical training periods like those employed by the U. S. Armed Services. In extreme cases, any cadet freshman or upperclassman who is unable to conform to the military way of life may be brought before a suitability board to determine his fitness to continue at The Citadel.

The various measures described above are designed to test a cadet's mettle and to determine his motivation for cadet life. Their value lies in developing a cadet's ability to perform his duty successfully under trying and stress-producing conditions.

Hazing is not a part of the Fourth Class System and is not condoned. The suffering of degradation, humiliation, and indignity does not foster the rapid development of these qualities sought in Fourth Classmen.

At The Citadel, where the system is administered by upperclass cadets and where all the cadets live together in barracks, the presence of individuals who are obsessed with the idea that indignities and humiliation are part of a student's education cannot be and is not tolerated. No cadet is wanted in the Corps who does not subscribe voluntarily to the regulations which absolutely bar hazing. All members of the third, second, and first classes are required to sign a statement that they understand the meaning of hazing and promise that they will not engage in hazing in any form during their connection with The Citadel. The occasional upperclassman who misuses the system is dealt with severely.

It is to be emphasized that the Fourth Class System is a formidable challenge to any young man. The decision to enter The Citadel must be preceded by a conviction on the part of the prospective cadet and his parents that he has the mental and physical characteristics appropriate to the system, and that he possesses a willingness to undergo the system's rigors with a determination to see it through and to reap its benefits.

Although the system is demanding and difficult, the rewards are considerable. They more than justify the effort. At recognition by the Corps in June, a better man emerges — one who is mentally, morally, physically, and spiritually prepared to accept the reins of leadership which will ultimately be his at The Citadel and in the world.

Hazing

Every cadet entering the third or higher class will be required to subscribe to the following promise:

"Hazing is defined as striking, laying hands upon, treating with violence, or offering bodily harm to a cadet who has been connected with the college for less than one year; or other treatment of a harassing, tyrannical, abusive, or humiliating nature; or requiring a fourth-class cadet to perform any personal service whatever for a member of the third, second or first class.

"I fully understand the meaning of hazing as above defined and hereby promise that I will not engage in hazing in any form during my connection with The Citadel."

Customs and Courtesies

"Customs and Courtesies," a 37-page booklet published at The Citadel, is designed to provide cadets with a compact manual of good deportment. This manual is used as the textbook in a course in deportment given under the supervision of the Commandant of Cadets.

After explaining clearly the value of a knowledge of the correct way of conducting oneself in social contacts, the booklet presents detailed

information on such matters as personal appearances and dress, correct speech, table manners, introductions, calling cards, calling, social correspondence, overnight visits, and punctuality.

Automobiles

Cadets of the first, second and third classes, proficient academically and in conduct for the preceding semester, are granted the privilege of having cars and parking them in assigned class parking areas on the campus. The privilege may be withdrawn on loss of good standing. Cars must be registered with the Adjutant. Evidence of legal state registration must be shown and all registrants will be required to have a minimum of bodily injury liability insurance, $10,000 per person, $20,000 each occurrence and property damage liability insurance, $5,000 each occurrence. Parking permits in the form of stickers will be issued to each registrant on the day he brings his car on the campus. Stickers will be affixed permanently on the left-front and the rear bumpers of the car.

Fourth classmen (freshmen) are not permitted to have cars on the campus during the first semester of the academic year. Fourth classmen proficient academically and in conduct for the first semester will be granted the privilege of having cars and parking them in an assigned area on the campus during the second semester.

Emergency and Special Leaves

By applying for permission for their sons' entry to The Citadel, parents voluntarily relinquish control over them to the authorities of the college, and it is expected that they will not ask for leaves for their sons except in emergencies. In every case the reason for the leave should be stated and the decision left to The Citadel authorities whether the circumstances warrant the approval of the application. This must be done before leaves will be approved.

The paragraphs which follow are extracted from regulations for the Corps of Cadets of The Citadel.

27.04. EMERGENCY AND SPECIAL LEAVES: a. Emergency leave may be granted only upon the request of the parent or guardian in the event of death or critical illness of a member of the cadet's immediate family. Duration of this leave will be predicated upon distance and time required. The immediate family includes parents, grandparents, brothers, sisters, and the permanent resident members of the family.

b. Special leave may be granted upon the request of the family or guardian in the event of the marriage of a member of the cadet's immediate family or golden wedding anniversary in the cadet's family.

c. Cadets may be granted special leave for such unusual business affairs as cannot be arranged by correspondence, but require the

presence of the cadet in person, in which case applications from parents or guardians stating the circumstances are required. In all cases, the final decision must rest with the authorities of the college.

41.08 CADETS FORBIDDEN TO ARRANGE FOR MEDICAL SERVICES: Except in emergency occurring on leave and requiring immediate medical attention, a cadet will not arrange for or receive professional treatment from doctors or specialists without permission of the Surgeon. Applications for any special leaves required for such treatment will be submitted to the Commandant and referred to the Surgeon.

41.09 SPECIAL MEDICAL AND DENTAL SERVICES: Dental work, special examinations of the eyes, etc., should be looked after during the summer, Christmas, or Easter furlough periods. Special leaves will not be granted for these purposes. In cases of emergency, there are competent specialists and ample facilities in Charleston to take care of any medical or dental needs of cadets. In matters of health, the regular Surgeon of the College will advise the proper course to be taken. In case the services of a local dentist, oculist or other specialist are necessary, the request therefor, will be submitted to the Surgeon, who, if he approves the request, will make all necessary appointments for the cadets.

Week-End Leave

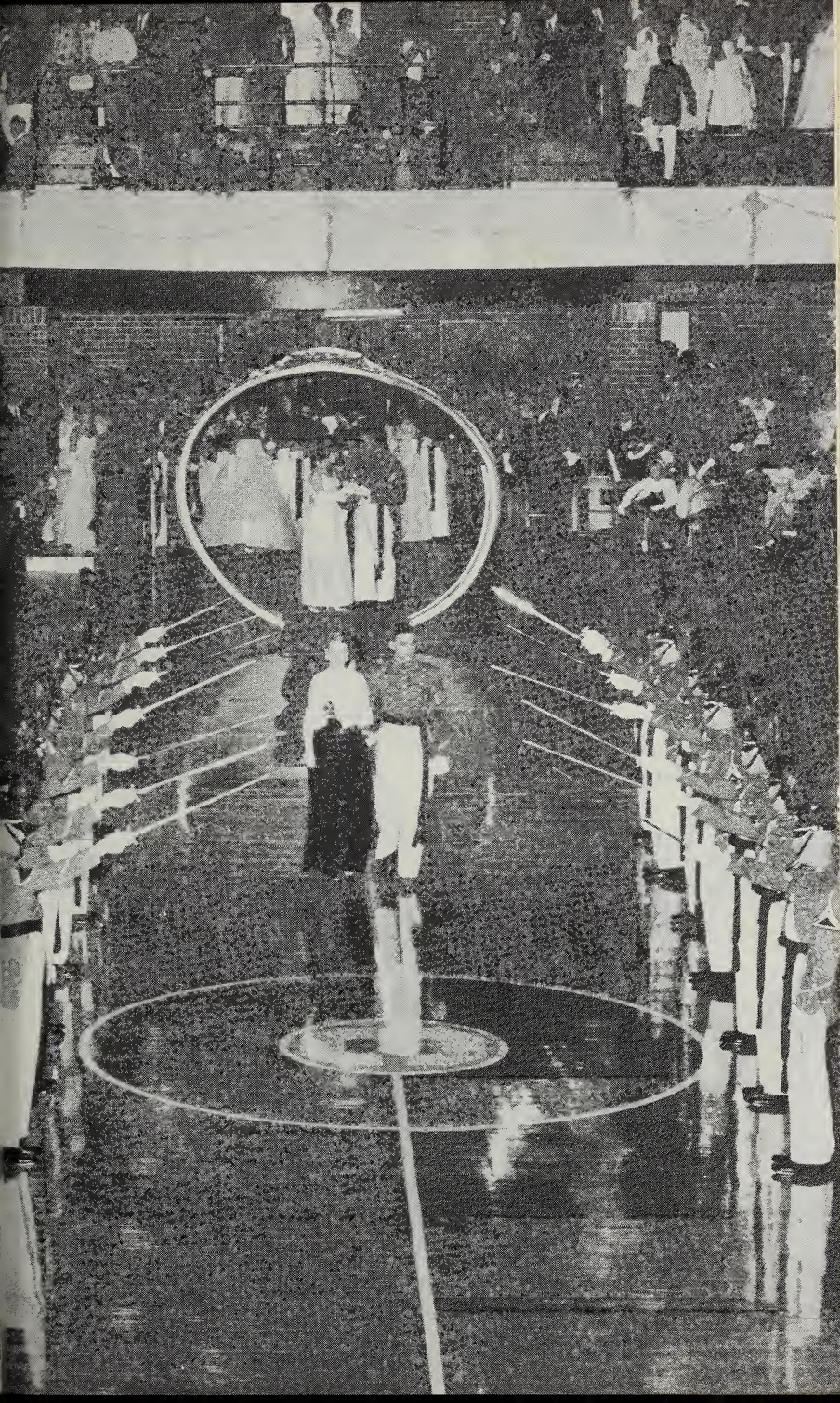
Generally, week-end leaves are authorized in the numbers shown below:

Class	First Semester	Second Semester	Total for School Year
First	4	4	8
Second	3	3	6
Third	2	2	4
Fourth	0	2	2

The Commandant of Cadets will assume that all cadets have permission to avail themselves of this privilege unless notified to the contrary in writing by parents or guardians.

Furloughs

Suspension of work for ten days, including Christmas Day and New Year's Day, is required by law. Normally furloughs are granted at Christmas, at Easter, and upon completion of the Second Semester.



THE

Mark Clark Hall

All cadet affairs, except the athletic programs and Beach Club activities, are now housed in Mark Clark Hall, The Citadel's student union building. This handsome and spacious structure was dedicated on May 31, 1957, and was completely furnished and equipped for the opening of the 1957-1958 session. The Board of Visitors of The Citadel named the structure Mark Clark Hall to honor our distinguished president, General Mark Wayne Clark. General Clark's untiring and productive efforts in the interest of the personal welfare of the cadets made this action most appropriate. Mark Clark Hall was constructed and furnished at a cost exceeding $1,000,000 from tuition fees paid by cadets; no State appropriation was required to defray this cost. The facilities which are provided are listed as follows:

First Floor	Second Floor	Third Floor
Reception Room	Lounge & Club Room	Conference Rooms
Hostess Office	Kitchen	*Sphinx* Staff Office
Cadet Depository	Cadet Store	*Brigadier* Staff Office
Cadet Canteen	Alcove Lounge	*Shako* Staff Office
Barber Shop	Auditorium	*Guidon* Staff Office
Post Office	Television Room	Honor Court
Billiard Room	Game Room	Projection Booth
Bowling Alley	Executive Offices	Dark Room
Cloak Room	Rest Rooms	10 Guest Rooms
Rest Rooms		Linen Closets & Storage
		Catholic Chaplain's Office

Full use is made of all these facilities. Cadets, alumni, and friends of The Citadel are proud of the fine edifice which contributes much to stimulate interest and participation in extracurricular activities.

The Beach Club

The Colonel Robert R. McCormick Beach Club of The Citadel, located on The Isle of Palms, was dedicated on November 30, 1958, and immediately put into operation. It offers to cadets unparalleled opportunities for enjoyment of sun, sea and surf. The beautiful two-story club house is on a five-acre tract overlooking the Atlantic.

The Beach Club was named to memorialize a great American soldier, editor and philanthropist, Colonel Robert Rutherford McCormick. His service in World War I under the command of General Charles Pelot Summerall, who was later President of The Citadel (1931-1953), was responsible for the Colonel's interest in and many benefactions to The Citadel. Actually, the proceeds from the sale of a magnificent piece of property given to The Citadel by Colonel McCormick, financed the construction of the Beach Club.

The simple, necessary rules and regulations for the use of the club, are established by the Cadet Beach Club Committee and are the

minimum essential to the enjoyment of all concerned. They may be changed as the need becomes apparent. The rules state that the Beach Club is for the use of cadets, staff, faculty, and their guests only; drinking or the possession of alcoholic beverages is prohibited; cadets must be in complete uniform when arriving and leaving. Swimming suits or appropriate civilian clothes are worn at the club; swimming is authorized only when life guards are on duty; no bathing suits may be worn in the main upstairs room, but they may be worn on the porches; cadets will limit visitors to three, except when visiting families are guests. All violations will be handled by the Cadet Beach Club Committee.

The schedules that the Committee has established are: the Beach Club is open from 3:00 until 5:30 p.m., on Mondays, Wednesdays, and Thursdays; Fridays from 6:00 until 11:00 p.m.; Saturdays from 12:00 noon until 11:00 p.m.; and Sundays from 10:00 a.m. until 9:30 p.m. Campus organizations, activities and companies may reserve the main room for parties by contacting the Cadet Beach Club Committee.

The Beach Club is well equipped for practically any type of party. On the second floor, in addition to a large screened porch, is a modern kitchen and a general purpose room with huge open fireplaces at each end. The kitchen is fully furnished with the latest in stainless steel equipment. The ground floor contains an apartment for the Resident Custodian, utility room and the bathhouse area.

The bathhouse area is equipped with a battery of vending machines providing carbonated drinks, coffee, milk, sandwiches, cigarettes, and pastries.

Outside on the eastern edge of the property is an oyster roast grill and four shuffleboard pads. In the wooded area around the beach house four grills are located, each with four picnic tables and running water. The area is to be floodlighted to facilitate nighttime parties for small groups.

Service Station

The Citadel Servicenter, located north of the Armory, fills a real need for convenient vehicle service. The service station hours are regulated to accommodate the needs of the cadets, faculty, staff and other employees of The Citadel. The prices charged those eligible to use the services are reasonable and the station is fully equipped. Net proceeds of this auxiliary enterprise go into The Citadel Educational Foundation for scholarships. It has proved to be a successful and satisfactory undertaking.

Publications

THE BRIGADIER is published semi-monthly by a staff of cadets. It serves as the campus newspaper and is financed by an allotment

from the student activities fee, augmented by the revenue from subscriptions and sale of advertising space.

THE SHAKO, the literary magazine, is published three times a year. It is supported by the income from the sale of advertising space, and an allotment from the student activities fee.

THE SPHINX is published annually by a staff of cadets. This publication serves as a semi-official record of the year. By means of copy and photographs, the faculty and staff, student classes, military organizations, athletic activities, social affairs, and other student programs are portrayed vividly to preserve a record of student life for posterity. THE SPHINX is financed by an allotment from the student activities fee and the sale of advertising space.

THE GUIDON, the cadet handbook, is published annually by a staff of cadets. The handbook contains a complete description of the activities of the college, college history, customs, duties and responsibilities of cadets and deals with other phases of cadet life. It is particularly helpful to entering freshmen. The publication is financed by the allocation of a portion of the student activities fee. It is distributed to all students at the beginning of the college year.

Literary and Discussion Groups

Four student societies offer opportunities for discussing subjects of cultural interest and for developing proficiency in public speaking: the Calliopean Literary Society, the International Relations Club, the English Club, and the Round Table.

The Calliopean Literary Society sponsors forensic interest including radio speaking, intramural and intercollegiate debating, and oratory. Membership is open to all students.

The International Relations Club is devoted to the study of contemporary world economic and political problems. Membership is restricted to those students especially interested in government and politics.

The English Club is an organization of students interested in English. Professional writers are heard and problems of literary interest are discussed.

The Round Table is a discussion group with a limited membership. Elections are made from lists prepared by the faculty of those students with marked intellectual interests.

Professional Clubs and Societies

The following professional clubs and chapters of national professional societies are to be found at The Citadel: Knox Chemical Society; Premedical Club; Student Chapter, American Society of Civil Engineers; Student Chapter, American Institute of Electrical Engineers; Sigma Pi Sigma, national honor society in physics; Student Chapter, Society of American Military Engineers; Student Chapter, American Ordnance

Association; Economic Honor Society; Association of the United States Army; Beta Iota Chapter of Pi Sigma Alpha, national political science honor society; Phi Alpha Theta, national honor society in history; Spanish-American Club; Student Chapter, American Road Builders Association; Student Section of American Institute of Physics; Student Education Association of South Carolina.

Committees of the Corps of Cadets

The President's Advisory Committee was inaugurated by General Mark W. Clark for the purpose of keeping the president and the Corps of Cadets working in congenial relationship.

The Cadet Honor Committee is made up of first classmen and is the group upon whom rests the actual administration of the Honor System of the Corps of Cadets.

The Cadet Orphanage Fund Committee is directly in charge of all phases of its program. The objective is to give the children of the Charleston orphanages a better Christmas. The committee collects donations from cadets, finds out the needs of the children, makes the purchases, and wraps and tags the presents by name. On the last day before Christmas furlough the cadets form a motorcade to visit each of the orphanages to present the gifts in person. This program was organized in 1952 and has grown each year since.

The Cadet Activity Advisory Committee has the mission of advising the Cadet Affairs Dean on all activities under the jurisdiction of that office. The committee pays particular attention to the auxiliary enterprises which include the cadet canteen, the barber shop, the billiard room, the bowling alleys, and the servicenter. The auxiliary enterprises are under the direct management of Major Harvey F. Brand.

The Ring and Invitation Committee of the First Class is charged with the responsibility of purchasing the class rings and the commencement invitations of the class. Specific regulations govern the design and specifications, the award of the contract for manufacture, the ordering, and the wearing of the ring. The committee is in charge of the ceremonies conducted when the first classmen receive their rings.

Hostess Bureau

The Citadel hostess, Mrs. A. E. Dufour, serves as social advisor for students. Her office is located in the reception room of Mark Clark Hall. Under her supervision dancing classes are conducted and informal tea dances are held in the auditorium on weekday afternoons. At the time of formal hops, she arranges for overnight accommodations in private homes for the ladies from out-of-town and plans for refreshments and the care of personal effects at the hops. She keeps the reception room open and maintained in good taste for the use of students and their guests from 9:00 a.m. until retreat daily. The hostess

serves the students constantly in the discussion and solution of their personal problems.

Social Events

All Citadel dances are under the sponsorship of the Standing Hop Committee, an organization elected by the cadets from the student body. The duties of this committee are to set dates for the dances, provide bands, and coordinate all plans for the hops held for the Corps.

The Citadel hops are the highlights of the social activities of the cadet. As dances are strictly for and by cadets, few invitations are issued to civilians. The formal hops held annually are the Homecoming Hop, First Class Ring Hop, the Corps Day Hop, and the Commencement Hop. Although these dances are formal, by tradition corsages are not worn by the cadets' dates. In addition to the formal dances, several informal dances are held throughout the year. Often the cadet orchestra, "The Bulldogs," plays for these dances. Other than the allocation from the Cadet Activities Fee for athletics, the next largest allotment of funds is made to finance these formal and informal hops and other social functions. Every cadet is privileged to attend the social activities held.

Clubs and Fraternities

It is not considered in keeping with the democratic ideals of The Citadel to encourage the formation of exclusive societies or fraternities, membership in which is based on other requirements than individual worth and achievement. When new cadets report to the college, all are at once put in uniform and, as far as possible, all artificial distinctions based on wealth, position, or influence are minimized and the cadet is encouraged to achieve his place by individual merit. All cadets live under practically identical conditions, and all are rated by the same standards, but there is a wide range of opportunity for each to develop in accordance with his needs and aptitudes. Elsewhere in this bulletin are described the various clubs, organizations, and activities that are open to all cadets.

The cadet orchestra, under the direction of Major Leon Freda, furnishes the music for informal dances.

The Chapel Choir, under the direction of Mr. Vernon W. Weston, serves as the choir at chapel services and gives programs in Charleston churches.

The Citadel Band, under the direction of Major Leon Freda, provides the music for parades, reviews, and other official ceremonies. Both the Drum and Bugle Corps and The Citadel Bagpipers are integral parts of the Band. Lieutenant L. J. Grant-Alexander is the Pipe Major.

The Rod and Gun Club is a new and growing club on campus. All four classes are permitted to participate in its activities. The club room, in the rear of the Armory, provides a convenient place for meetings and contains a personal locker and gun rack facility which was constructed by cadet members. Several organized hunting and fishing trips have been realized and a growing number of outdoor activities is expected.

The club has available an automatic trap range. A shot-shell reloader provides members a weekly shoot at a low cost. The main objectives of the club are to extend an appreciation for good sportsmanship and increase the enjoyment of outdoor activities.

Auxiliary Enterprises

The Citadel now owns and operates all Auxiliary Enterprises under the supervision of the Department of Cadet Affairs. The enterprises are in existence primarily to provide appropriate and timely services for the convenience of the Corps of Cadets. The net profits from each enterprise are deposited in the Mark Clark Hall Fund. This Fund is used exclusively to foster and support many other phases of cadet life as directed by the President of The Citadel.

These enterprises are the barber shop, beach club, billiard room, bowling alleys, cadet canteen, motion pictures, service station and automatic vending machines.

Other Organizations

There are several important cadet organizations that do not come under a specific classification. The following should be mentioned as having distinctive functions in cadet life: the Summerall Guards (first classmen), the Bond Volunteers (second classmen), the Junior Sword Drill, Sons of the American Revolution, Alpha Phi Omega (scouting), the Yacht Club, the Camera Club, and the regional cadet clubs.

Director of Athletics: Edward L. Teague, Jr.

Coaches

Football: Edward L. Teague, D. C. Henry Witt, Pride G. Ratterree, Jack R. Hall, Chalmers M. Port, Jerry A. Nettles, David J. Fagg
Basketball: Melvin K. Thompson, Paul M. Brandenburg
Baseball: Chalmers M. Port
Track: Jack R. Hall, Jerry A. Nettles
Tennis: Donald C. Bunch
Golf: George M. Rariden
Rifle: Capt. Jerry C. Whitmire
Wrestling: David J. Fagg
Swimming: Ronald A. Reilly
Indoor Track: Jack R. Hall, Jerry A. Nettles
Staff: Assistant Director, Henry M. Read; Publicity, George R. Wenzell; Trainer, William M. Bostwick; Administrative Assistant, George M. Rariden

The Citadel is a member of the National Collegiate Athletic Association, and the Southern Conference. The Southern Conference is made up of ten institutions: The Citadel, Davidson College, Furman University, George Washington University, University of Richmond, Virginia Military Institute, Virginia Polytechnic Institute, West Virginia University, the College of William and Mary, and East Carolina College. The Citadel sponsors eleven teams in inter-collegiate athletics, both varsity and freshman. The eleven sports are football, basketball, swimming, wrestling, indoor track, baseball, outdoor track, rifle, golf, tennis, and cross-country.

Facilities for well-rounded development in athletics are provided for all cadets and are constantly being improved as the program expands. Home football games are played in Johnson Hagood Memorial Stadium, which seats over 22,000 spectators. The Citadel Armory is used not only for varsity basketball but for intramural basketball and recreational games. The seating capacity for varsity basketball is approximately 4,500 with ample seating for all cadets in bleachers and seats surrounding the main court. Home baseball games are played on the Washington Light Infantry Field, which is located in the southwest area of the campus. The varsity and freshman wrestlers have a large wrestling practice room which is located in the basement of Alumni Hall and all official matches are held in the Armory. The swimming pool has six lanes and is of regulation length for official inter-collegiate meets. It is ranked as one of the outstanding pools in the Southern Conference. There are six well-kept all-weather tennis courts on the campus for varsity tennis use and for the convenience of all cadets. Golf facilities are available to Citadel cadets at the local courses. Indoor and outdoor rifle ranges are available for varsity competition as well as for training and recreational use

by all cadets. Willson Field, a large area on the extreme north end of the campus, provides space not only for two practice football fields but also a quarter-mile track which has a 220-yard straight-away. Track and field events in official competition are held on this field. It is also used for intramural activities when not in use by varsity teams.

All intercollegiate athletic teams are handled by experienced and competent coaches who take every precaution for the physical conditioning of the teams under their care. A carefully supervised training room is open all year for the care and treatment of athletes on all eleven teams.

The Citadel is justly proud of the intercollegiate record of all the teams representing the military college on the different fields of athletic competition, but is aware of the fact that not all students can compete in intercollegiate athletics, so that every measure is taken to provide adequate facilities for healthful athletic participation for all cadets.

Applicants for admission to The Citadel must be not less than sixteen nor have reached twenty-one years of age at time of entrance. They must be at least five feet in height, of good moral character, and qualified for R.O.T.C.

Conviction of a criminal offense showing poor moral character will be cause for rejection.

No married person will be admitted as a cadet, and if any cadet shall be married while in college, he shall be discharged immediately. Each year every cadet must certify in writing that he is not married.

Formal application for admission must be submitted by parent or guardian on the blank provided by the Registrar, The Citadel, Charleston, S. C. A non-refundable $5.00 application fee must accompany the completed application request. This $5.00 fee will be used to defray partial cost of processing the application request.

The requirements for admission to the freshman class are those prescribed by the Southern Association of Colleges and Schools, of which The Citadel is a member. The standards of the Association require "the satisfactory completion of a four-year course of not less than fifteen units in a secondary school approved by a recognized accrediting agency, or in a secondary school that is a member of this Association, or the equivalent of such a course as shown by examination."

High-school subjects required are four units of English; three of mathematics, two of which must be in algebra; and one of history, For physical science and engineering courses, two units of algebra and one unit of plane geometry are mandatory. Too low a score on the mathematics entrance examination will disqualify an accepted applicant from majoring in the fields of engineering and physical science.

In addition to the above minimum scholastic requirements, acceptance for admission to The Citadel is determined by:

1. Entrance examinations.
2. High school grades.
3. Graduation from an accredited high school.
4. Recommendation of high school official.
5. Qualification for R.O.T.C.

South Carolina applicants must furnish a written certificate signed by at least two graduates of The Citadel who are residents of South Carolina certifying that in their opinion the applicant is a person of good moral character and will conform to the student life, ethical standards, and discipline of the college.

The Citadel authorities reserve the right, at their discretion, to require a non-South Carolina applicant to have a written certificate signed by at least two graduates of The Citadel certifying that in their opinion the applicant is a person of good moral character and will conform to the student life, ethical standards, and discipline of the college.

All candidates for admission to The Citadel are required to stand the following College Entrance Examination Board tests:

Scholastic Aptitude Test
English Composition Achievement Test
Mathematics Achievement Test (Level I or II)

The aptitude tests are given in the morning and the English and mathematics achievement tests are given in the afternoon of the same day.

The tests consist of exercises demanding verbal communication, mathematical reasoning, and English language skills. The mathematics achievement test requires a knowledge of algebra and plane geometry. The student's development of English vocabulary and comprehension throughout his schooling will be drawn upon in the verbal reasoning and English language skills exercises. The student cannot expect, therefore, that last minute coaching and cramming will contribute importantly to his examination score. In order to apply for these tests, the applicant must write directly to College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey, for their Bulletin of Information and examination application blank. The fee for the complete examination is $11.25, payable with completed application, which must be submitted at least one month prior to the date of the test. If an applicant lists The Citadel as one of the colleges in which he is interested, the College Entrance Examination Board will send his test scores to the Registrar of The Citadel approximately thirty days after the tests are taken.

These tests will be given at locations throughout the United States and some foreign countries on December 4, 1965, and in 1966 on January 8, and March 5. The aptitude test is given in the morning and the various achievement tests of one hour each are given in the afternoon on dates given above. An applicant may take three afternoon achievement tests. The Citadel requires the English and mathematics only. All applicants for The Citadel are urged to complete all required entrance examinations not later than March 5, 1966, and if possible by January 8, 1966. For further information write the College Entrance Examination Board, Box 592, Princeton, New Jersey.

A thorough physical examination is required of all applicants for admission. Forms for reporting the results of the examinations are supplied by the Registrar and when completed should be returned to him.

A reservation fee of $50.00 is required of all new cadets accepted for enrollment in the regular session at The Citadel, payable within 15 days after notification of acceptance by the Registrar. The reservation fee will be applied to the first installment of regular college fees. This fee is positively not refundable to newly accepted cadets who cancel their reservation after July 1.

Applications for admission should be submitted early in the student's senior year of secondary school. New students are admitted only in

September. As all available facilities of the institution are required for continued education and training of cadets promoted from the fourth class, it is the general policy of the college not to accept transfer students.

Policy of Admissions

The prospective student's rating in the *College Entrance Examination Board Test* will be given considerable weight, but it will remain only one factor to be used in determining the student's acceptability. His high school grades must indicate the probability of success with college work, he must have reached a maturity level sufficient for serious study, he must have proper motivation for college work, and he must have a suitable recommendation from his high school.

The prospective student's *high-school record* will be given careful examination to see that his grades and high-school rank indicate the ability to do college work and that the student is properly motivated and has established habits of study essential to college success. Particular attention will be given to the grades obtained in college preparatory subjects, such as English, mathematics, science, history and foreign languages.

A *positive recommendation* of each student seeking admission will be sought from the high school he attended. The recommendation will be sought from the high school principal or guidance counselor. This recommendation will be given considerable weight since it represents a judgment on ability and maturity to perform college-level work based upon considerable experience with the student during his most formative years. If a student has sufficient ability but lacks emotional stability, motivation, or suitable character, he may be rejected for admission. On the contrary, if a student is close to the borderline in ability and has great motivation, advanced maturity, is emotionally stable and of excellent character, he will be given every consideration for admission, since his good qualities seem to outweigh his limitations and he seems to have a fair chance of college success.

There are a number of intangible factors that are important but are difficult to measure. Nevertheless, The Citadel will attempt to assess these factors by all possible means. These *miscellaneous factors* concern character, maturity, motivation, contribution to student life, amenability and obedience to authority, and salutary rules of discipline and emotional stability. Where any of these factors are in question, the College will obtain additional data on them by any of the following methods: interviewing the potential student; interviewing the parents; interviewing the leaders of the community where the potential student resides; asking the student to write a special report on such subjects as goals in life, his reason for his choice of college, and his vocational selection; or to take a special test to determine any of the factors in question. While none of these methods of screening candidates is con-

clusive in itself, many of them can be used to supplement other admittance requirements in obtaining suitable students capable of college-level work.

In summary, *no single factor* will be controlling in admitting students. Instead, the college will look for well-rounded, mature students with good motivation and a good educational achievement level, so as to upgrade its student effort, its teaching, and its development of future leaders.

Prospective Students

The Citadel strongly urges prospective students to visit the campus for a weekend during the academic school year after January 5, 1966. This will give the student a first-hand opportunity to observe cadet life. Due to the military phase of The Citadel program, it is *very important* that an applicant take advantage of this opportunity. Since space in barracks for these visits is limited, visitors are requested to notify the Adjutant by letter at least two weeks before the planned visit. Visitors may eat their meals in the cadet dining hall and stay in barracks at a nominal charge. Details of the visitation program will be sent to applicants following receipt of their formal application.

Withdrawal

If a cadet finds it necessary to withdraw from The Citadel during the college year or does not wish to return the following fall, a request for an honorable discharge must be sent by the parent or guardian in writing directly to the Registrar.

It is not the policy of The Citadel to grant discharges between the completion of examination and the Commencement exercises, or at the beginning of a furlough.

The Citadel, a state-supported institution, is operated on a non-profit basis. The cost of operation is borne through the collection of fees from the students and appropriations made by the General Assembly of South Carolina. The college reserves the right at any time to adjust fees collected from the students to meet the current cost of operation.

The State Budget and Control Board has recommended to the South Carolina Legislature that fees be increased at all state-supported colleges and universities. At the time of printing of this catalogue the appropriation and resulting fee increases had not been determined by the Legislature. However, it does appear that an increase of not less than $80.00 for South Carolina residents and $285.00 for non-residents per academic year is in the offing. When the exact increase has been determined a revised expense section will be printed and mailed to the parents of both students and prospective students.

Payments

The Quartermaster of The Citadel is the Fiscal Officer, and all transactions relating to payments should be conducted through him. All remittances should be made by money order or check made payable to The Citadel and should be mailed directly to Colonel J. F. Bosch, Jr., Quartermaster.

The academic year at The Citadel is divided into two semesters. For the convenience of the parents an installment system has been instituted at The Citadel for the payment of college fees. The payment of college fees for each semester is due and payable as shown on the schedule below.

Bills will be rendered by the Quartermaster to parents approximately one month prior to the date the installment is due. All college fees must be paid by the dates indicated in the schedule below.

Schedule of Payments for South Carolina Students

Date Due	*Freshmen*	*Sophomores*	*Juniors*	*Seniors*
†Reservation Fee: Fifteen Days After Notice of Acceptance	$ 50.00			
On or Before July 1		$ 50.00	$ 50.00	$ 50.00
First Semester:				
1st Installment - 9/07/65†	$ 782.00§			
1st Installment - 9/14/65†		467.00	417.00	367.00
2nd Installment - 11/15/65	344.00	244.00	244.00	244.00
Total First Semester	$1126.00	$ 711.00	$ 661.00	$ 611.00
Second Semester:				
4th Installment - 4/01/66	$ 312.00*	$ 312.00*	$ 312.00*	$ 312.00*
3rd Installment - 1/31/66	269.00*	269.00*	294.00*	294.00*
Total Second Semester	$ 581.00	$ 581.00	$ 606.00	$ 606.00
Total Academic Year	$1707.00	$1292.00	$1267.00	$1217.00

Schedule of Payments for Out-of-State Students

Date Due	*Fresh-men*	*Sopho-mores*	*Juniors*	*Seniors*
†Reservation Fee:				
Fifteen Days After Notice of Acceptance	$ 50.00			
On or Before July 1		$ 50.00	$ 50.00	$ 50.00
First Semester:				
1st Installment - 9/07/65†	$ 842.00§			
1st Installment - 9/15/65†		527.00	477.00	427.00
2nd Installment - 11/15/65	404.00	304.00	304.00	304.00
Total First Semester	$1246.00	$ 831.00	$ 781.00	$ 731.00
Second Semester:				
3rd Installment - 2/31/66	$ 372.00*	$ 372.00*	$ 372.00*	$ 372.00*
4th Installment - 4/01/66	329.00*	329.00*	354.00*	354.00*
Total Second Semester	$ 701.00	$ 701.00	$ 726.00	$ 726.00
Total Academic Year	$1947.00	$1532.00	$1507.00	$1457.00

† See footnote One on page 61.
§ See footnote Two on page 61.
* See footnote Three on page 61.

Summary of Expenses for South Carolina Students

Fees:	*Fresh-men*	*Sopho-mores*	*Juniors*	*Seniors*
Registration Fee	$ 6.00	$ 6.00	$ 6.00	$ 6.00
Tuition Fee	80.00	80.00	80.00	80.00
College Fee	246.00	246.00	246.00	246.00
Auxiliary Services	680.00	680.00	680.00	680.00
Total Fees	$1012.00	$1012.00	$1012.00	$1012.00
Deposits:				
Books and Supplies	$ 110.00§	$ 105.00	$ 105.00	$ 105.00
Uniforms and Accessories	575.00*	175.00*	150.00*	100.00*
Breakage	10.00			
Total Deposits	$ 695.00	$ 280.00	$ 255.00	$ 205.00
Total Expenses for South Carolina Students	$1707.00	$1292.00	$1267.00	$1217.00

§ See footnote Two on page 61.
* See footnote Three on page 61.

Summary of Expenses for Out-of State Students

Fees:

	Freshmen	*Sophomores*	*Juniors*	*Seniors*
Registration Fee	$ 6.00	$ 6.00	$ 6.00	$ 6.00
Tuition Fee	320.00	320.00	320.00	320.00
College Fee	246.00	246.00	246.00	246.00
Auxiliary Services	680.00	680.00	680.00	680.00
Total Fees	$1252.00	$1252.00	$1252.00	$1252.00
Deposits:				
Books and Supplies	$ 110.00§	$ 105.00	$ 105.00	$ 105.00
Uniforms and Accessories	575.00*	175.00*	150.00*	100.00*
Breakage	10.00			
	$ 695.00	$ 280.00	$ 255.00	$ 205.00
	$1947.00	$1532.00	$1507.00	$1457.00

§ See footnote Two on page 61.

* See footnote Three on page 61.

Footnotes on Schedules of Payments and Expenses

† 1. The reservation fee of $50.00 will be credited to the first installment of the first semester.

§ 2. An additional deposit of $60.00 is required of freshman students who elect engineering drawing.

* 3. Those Fourth Classmen (Freshmen) and Third Classmen (Sophomores) formally enrolled under the Army or Air Force R.O.T.C. Basic Program will receive a credit of $25.00 uniform allowance on the installment due on January 31, 1966 and April 1, 1966, respectively.

Those Second Classmen (Juniors) and First Classmen (Seniors) formally enrolled under the Army or Air Force Advanced Program will receive a $50.00 uniform allowance credit on the installment due on January 31, 1966 and April 1, 1966, respectively.

For particulars see page 68.

Explanation of Fees

Reservation Fee: A reservation fee of $50.00 is required of all cadets. This fee is not an additional charge but is an advance payment toward the fees due for the Fall Semester. It assures a cadet a place in the Corps of Cadets and barracks for the following September.

All new cadets are required to pay this fee within fifteen days after notice of acceptance has been received from the Registrar.

A cadet currently enrolled who plans to continue his education at The Citadel is also required to pay the reservation fee not later than July 1 for the semester beginning in September. If this fee is not paid

by July 1, The Citadel is in no way obligated to permit him to continue his education at The Citadel.

The reservation fee will be refunded to old students who notify the Registrar in writing not later than July 1 to cancel their reservations at The Citadel. After July 1 but prior to registration for the Fall Semester, this fee will be refunded only to those upperclassmen (sophomores, juniors, and seniors) who have been dropped from enrollment at The Citadel due to academic deficiencies or other causes.

Those students who complete registration for the fall semester will receive credit on the first installment for the reservation fee previously paid.

Tuition. — The Board of Visitors of The Citadel has established the following tuition fees:

South Carolina Students — For all students whose guardians or parents reside in South Carolina the tuition fee has been established at $80.00 per academic year or $40.00 per semester.

Out-of-State Students — All students whose guardians or parents are non-residents of South Carolina will pay an out-of-state tuition fee.

The out-of-state tuition fee has been established at $320.00 per academic year or $160.00 per semester.

This fee is not refundable.

College Fee. — A college fee of $246.00 an academic year is assessed each student. This fee is used in the support of the Library, General overhead and maintenance of the college, and Student Activities. That portion of the fee going to the Student Activities is used in the support of student publications and organizations such as The Sphinx, cadet annual; The Brigadier, cadet newspaper; The Shako, cadet literary magazine; The Guidon, an information and orientation handbook; Religious Activities, social functions, including dances, intramural program, and athletics. That portion of the fee for athletics is not an admission fee to athletic contests, since students are admitted to all athletic games free of charge. The College Fee is not refundable.

Auxiliary Services Fee. — A fee of $680.00 an academic year is assessed each student. This fee is used to cover room, board, laundry, normal hospital care, and hair cuts. Due to many uncontrollable factors, the college reserves the right to increase this fee at any time to meet current increases in the cost of operation. This fee is refundable on a pro-rated basis upon withdrawal from school.

Breakage. — A $10.00 deposit will be maintained by all cadets enrolled at The Citadel. When there is insufficient money in the cadet's Quartermaster Account to cover the cost of damages to buildings, rooms, equipment, or loss of R.O.T.C. manuals and government property, this deposit will be used. This deposit is refundable after graduation or withdrawal from The Citadel.

Books and Supplies. — This deposit is used to cover the cost of books, supplies, uniform alterations, dry cleaning and pressing tickets, laboratory fees, engineering drawing equipment and supplies. The amount expended by each student varies. The required deposit is based on the average needs and in most cases is ample. If the deposit is not sufficient an additional deposit should be made. The required deposits are as follows:

Freshman Year	$110.00
Additional deposits for freshman engineering students (Students who elect engineering drawing will be rendered a supplementary bill for this deposit to cover the purchase of drawing instruments and supplies.)	$ 60.00
Sophomores	$105.00
Juniors	$105.00
Seniors	$105.00

Uniforms. — All cadets are required to wear The Citadel uniform which is issued by the college. New cadets should not bring a supply of civilian clothes other than those which are worn upon reporting to the college as they are not permitted to wear civilian clothes except during authorized furloughs. It is also advisable to bring inexpensive trunks or suitcases since it is not permissible to retain them in the cadet's room; luggage must be stored in a warehouse provided for such at the risk of the owner.

Cost of uniforms should not be considered as an educational expense but rather a clothing expense which is incidental to attending any college. With proper care, the uniform should last for several years. Of course, the requirements during the subsequent years will depend on the manner in which the cadet has cared for his uniform. Small deposits are made in the sophomore, junior and senior years to replace worn-out uniforms. The overall cost of the uniform should not exceed that which would be incurred in purchasing clothes to attend a civilian college. The uniform deposit requirements are as follows:

Freshman Year	$575.00
Sophomore Year	175.00
Junior Year	150.00
Senior Year	100.00

The woolen uniforms issued to cadets are custom-made for The Citadel. Once the uniforms have been fitted and issued to a cadet the entire cost will be charged to him.

Since the full dress uniform is tailor-made to the measurements of each cadet after enrolling at The Citadel, those cadets withdrawing from the school will be charged a cancellation fee of $10.00 for cancelling the purchase of the full dress uniform during its manufacture. The deadline for cancelling the purchase of the full dress uniform

is November 15, 1965. After this date no cancellations will be accepted and the cadet will be charged the entire cost of the full dress uniform.

The cost of articles and uniforms issued to the freshmen during the 1964-65 academic year was as follows:

Quantity	*Article*	*Cost*
1	Bed Spread, Citadel	$ 7.23
1	Blanket, Citadel	7.26
1	Blouse, Dress, wool	48.83
1	Blouse, Full Dress, wool	64.73
1	Cap, dress	7.15
2	Caps, field, @ $2.48	4.96
1	Cap, white with covers	6.33
1	Coat, Overcoat, wool	52.19
1	Coat, rain	22.39
2	Coat, white and accessories	39.60
4	Cuffs, pairs, @ $.45	1.80
2	Covers, mattress, @ $2.09	4.18
2	Gloves, pairs dance @ $.61	1.22
6	Gloves, pairs, drill @ $.96	5.76
1	Gloves, pair, leather	2.60
1	Jacket, grey	15.07
1	Muffler	1.10
1	Shako, with pom pon chain	11.72
10	Shirts, grey cotton @ $3.18	31.80
6	Shirts, grey cotton, short sleeve @ $2.79	16.74
2	Shirts, athletic @ $.84	1.68
2	Shorts, athletic @ $.66	1.32
1	Suit, sweat	3.46
10	Trousers, grey cotton @ $3.50	35.00
4	Trousers, White, full dress @ $7.09	28.36
2	Trousers, Dress, wool @ $20.48	40.96
1	Trousers, Full Dress, Wool	20.79
3	Laundry Bags	1.98
1	Bathrobe	5.31
Miscellaneous Items: 1 Belt, waist; 8 Collars; 1 Cover, rain cap; 4 cuffs, pr. 2 Letters, company; 1 Links, pair, cuff; 2 Numerals, class; 1 Plate, breast; 1 Plate, waist; Rental, cartridge box or music pouch; supplies; 2 Tags, Name; 1 Tie; Shine Kit, Clothes Hangers; Suspenders; Webbing		21.05
	Total	$512.57
	S. C. Sales Tax	15.38
		$527.95

The above prices were in effect during the 1964-65 academic year and are subject to changes in accordance with the contract prices at the time of purchase by the cadets. Extra shirts, trousers, or other articles of uniform in excess of the above quantities are not included in the required deposit. Additional deposits should be made if extra shirts, trousers, or other articles of uniform are desired.

In order to keep the appearance of the Corps of Cadets at the highest level, an additional issue of one dress blouse, one pair dress trousers, has been prescribed. Cadets in the Third Class (Sophomore Year) will be measured for thes articles of uniform in November with delivery being made not later than March 15 of the next year.

Cadets in the Second Class (Juniors) will be issued four cotton shirts during the first semester.

The policy of The Citadel does not permit the use of used uniforms. Entering freshmen are advised not to procure such uniforms since they will not be approved.

In accordance with the above policy the college does not operate a second-hand uniforms department. Parents should not send used uniforms to the Quartermaster or college tailor with the request that they be sold. Such uniforms when received will be returned at the expense of the sender.

Diploma Fee. — The charge for the diploma is $10.00.

Transcript Fee. — Official transcripts of scholastic records will be furnished upon request. There is no charge for the initial transcript, but a fee of $1.00 is charged on all subsequent ones. Remittances for transcripts should be made payable to the Quartermaster. The payment should accompany the application for the transcript and should be mailed directly to the Registrar.

Laboratory Fee. — A laboratory fee of $10.00 a semester is charged students taking courses involving laboratory work in biology, chemistry, civil engineering, electrical engineering, geology, and physics. These laboratory fees are used to cover the added expense of supplies and costly equipment used in the teaching of these courses. This fee is not collected directly but is included in the estimated deposit for books and supplies, and is chargeable against the deposit.

A laboratory fee of $5.00 a semester is charged to students of the junior and senior classes majoring in physical education. A fee of $2.00 a semester is charged to students in Business Statistics and Senior Accounting.

Refunds

Since the college fees are paid to The Citadel in four equal installments during the Academic Year, no refunds for registration, tuition,

and college fees will be made when a cadet withdraws during the period for which his fees have been paid. However, if a cadet should withdraw prior to the date on which an installment is due the amount of any installments paid in advance will be refunded. On the other hand, a cadet who is enrolled on the date on which an installment is due, the entire amount of the installment will be due and will not be refunded.

Auxiliary services fee will be refunded on a pro-rata basis. All unused portions of the book and uniform deposit will be refunded.

The uniform and book deposits are estimated to cover the needs of the cadet for such purchases during the entire academic year. It should not be expected that the school refund this money to the cadet for his personal needs. The unexpended balances of these deposits will be returned upon request in June at the close of the academic year; otherwise, they will be held to the cadet's credit until the next academic year or until he withdraws from The Citadel.

Additional Information

Unsatisfactory Accounts. — When a cadet's account is in an unsatisfactory condition, no honorable discharge will be made, no diploma will be awarded, and no transcript of credits will be provided until a satisfactory settlement of the account has been made.

Pocket Money. — The college does not handle pocket money accounts. All allowances for pocket money should be sent directly to the cadet. No estimate is made of this requirement, for the amount varies among the cadets and can best be determined by the cadet and his parents.

Cadets who receive substantial allowances for their personal needs should deposit this money in The Citadel Depository which is maintained for the accommodation and convenience of the cadets. This depository is located in Mark Clark Hall.

Clothing and Bedding

All cadets are required to furnish their own bedclothes except a bedspread and blanket which will be issued to each cadet. Both the bedspread and the blanket are in Citadel colors and have The Citadel seal imprinted thereon. These items can be used after graduation on single beds.

Beds and mattresses are provided by the college, but pillows are not. Two mattress covers will be issued at cost to each cadet. Cadets *must* come provided with the following articles:

Three pajamas
Twelve white tee shirts and twelve short drawers
Twelve pairs of black socks
Four pairs of white athletic socks
One pair white tennis shoes
Ten white towels
One pillow
Three white pillow cases
Four white sheets for single bed

Twelve white handkerchiefs
One pair bedroom slippers or shower shoes
Two pairs, plain toe black oxford shoes (with rubber heels)
One Army style blanket for single bed
Toilet articles

Since the school does not furnish bed linens, it is advisable that each cadet who ships his belongings to The Citadel bring with him two sheets, one pillow case, and one pillow for his use until he is able to get access to his belongings.

New cadets are advised to break in their cadet uniforms shoes at least three weeks prior to reporting to The Citadel.

Before the opening of the First Semester a New Cadet is assigned an identification number, which he retains as long as he remains at The Citadel. This five-digit number will be used by the cadet as an identification number and as his laundry number. All clothing should be marked with his name and full initials, as well as the identification number, as follows: sheets, towels, and handkerchiefs, in the corner; pillow cases, in the corner at open end; collars, on inside near center; shirts, on bands at back of neck; socks, on leg near top; other articles, where most practicable.

Accommodations for Cadets During Holidays

Cadets who cannot go to their homes during the Christmas and Easter holidays may remain on the campus and occupy the visiting teams' dormitory. The barracks and the dining hall will be closed during vacations.

Employment

The time of a cadet at The Citadel is so taken up with his duties that there is no opportunity for outside employment for the purpose of financial assistance. However, there are a limited number of part-time jobs available from time to time with various campus activities. These jobs are not of a substantial nature which can be relied upon to pay a cadet's college fees. To be eligible for such work a cadet must be an upper classman and must be proficient in both his academic work and conduct.

Hospital

The hospital facilities at The Citadel are excellent, and all ordinary cases of sickness are treated by the surgeon and the nurses of the college without expense to the parent. Surgical cases requiring the removal of a cadet to an infirmary in the city, services of a special nurse in the college hospital, and special treatment of eyes, ears, teeth, etc., must be at the expense of the parents or guardian.

R.O.T.C. Allowances

Students formally enrolled (see pages 97 or 146 for particulars) in Military or Air Science I and II are paid by the Government $25.00

per semester as a uniform allowance. Fourth Classmen (freshmen) and Third Classmen (sophomores) must be enrolled at least through the sixth week to receive this allowance. Students formally enrolled in the Advanced Course are paid $50.00 per semester as a uniform allowance. The above uniform allowances are not paid directly to the students but are credited to the students' Quartermaster accounts.

In addition to the uniform allowance a retainer pay of approximately $40.00 per month is paid directly to those students formally enrolled in the Advanced Course.

Students formally enrolled in either the Army or Air ROTC Programs must attend a summer camp between their junior and senior years. At this camp students receive the pay rate of $120.60 per month while attending, plus travel pay to and from camp computed at a rate of six cents per mile. During the camp period the retainer pay is not paid.

Summary of Estimated R.O.T.C. Allowances

Fourth Class year (Freshmen) (formally enrolled):	
Commutation of Uniforms Allowance	$ 50.00
Total	$ 50.00
Third Class Year (Sophomores) (formally enrolled):	
Commutation of Uniform Allowance	$ 50.00
Total	$ 50.00
Second Class Year (Juniors) (formally enrolled):	
Commutation of Uniform Allowance	$100.00
* Retainer Pay (estimate)	$400.00
Total	$500.00
First Class Year (Seniors) (formally enrolled):	
Commutation of Uniform Allowance	$100.00
Retainer Pay (estimate)	$400.00
Total	$500.00
— Summer Camp:	
Air Force Cadets (four weeks) (taxable)	$120.60
Army Cadets (six weeks) (taxable)	$180.90
Travel - six cents a mile to and from camp (formally enrolled)	

* Retainer Pay: Paid at $40.00 per month not to exceed 20 months. (Paid only while under contract)

— Summer Camp: $120.60 per month.

Summer Session

A summer session is conducted for students who wish to accelerate their work or to make up conditions or failures.

The summer session must be self-supporting, and the same fees must

be charged to both South Carolina and out-of-state students. Fees for the summer session are as follows:

	First Term	*Second Term*
Tuition - $12 per semester credit hour	....	....
Summer Term Fee	$ 15.00	$ 15.00
Room, Board and Laundry	$114.00	95.00
Hospital*	6.50	6.50
Laboratory - for laboratory courses in biology, chemistry and physics	10.00	10.00

* Charged only to students living in barracks.

During the summer session all purchases of books and supplies will be on a cash basis. There will be no charging to the student's account since no book or supply deposits will be collected.

It is pointed out that bills for the summer session will not be sent to the parents by the Quartermaster. It is impossible for the Quartermaster to compute these bills since the tuition fee is based on the number of credit hours of work which is scheduled by the student. The student should come supplied with sufficient cash to take care of his fees for the summer session.

SCHOLARSHIPS AND HONORS

Scholarships

Beginning with fall term of 1965, several Citadel Scholarships will be available. Each year some of these are given to cadets entering The Citadel for the first time, and others are awarded to cadets presently in the college, based on accomplishments in the Corps both academically and militarily. The scholarships listed below fall under four categories:

Category I — Authorized by the Scholarship Board of Trustees of the Board of Visitors and selected by the Citadel Scholarship Committee.

Category II — Authorized by the Scholarship Board of Trustees of Association of Citadel Men and selected by Citadel Scholarship Committee.

Category III — Authorized by the President of the College and selected by the Citadel Scholarship Committee.

Category IV — Given by individuals or companies directly to recipients without any selection by The Citadel Scholarship Committee.

The Citadel assumes the responsibility for awards given under the first three categories. Listed below are some of the current scholarships:

Category I

The Joseph D. Aiken Scholarships cover all expenses for the first three years and are supported by a trust fund made possible by a bequest of the late Joseph D. Aiken. It is anticipated that several scholarships will be available each year, but they are limited to applicants from the New England states with some preference being given to Rhode Island and Connecticut residents.

Baruch Scholarships, with a value of $300 each, were inaugurated from the income of a fund donated to The Citadel by Mr. Bernard Baruch.

The Alton H. Bryant Memorial Scholarships are worth $500 a year for four years. They are in memory of Alton H. Bryant, a graduate of the Class of 1940, who lost his life in the service of his country. Applicants are limited to residents of Orangeburg County, South Carolina.

The Crouch-Lee Scholarship has a present value of $300 for four years. The James R. Crouch award was founded in 1925 by the late James R. Crouch of Greenville, South Carolina. *The William States Lee Scholarship* was founded the same year by the late William States Lee of Charlotte, North Carolina. The deeds provided that the beneficiary shall be limited to residents of South Carolina.

The Richard P. Cardwell Scholarship was established by General and Mrs. Eugene F. Cardwell in memory of their son, Cadet Richard P.

Cardwell, a member of the Class of 1957. It is given in alternate years to a member of the sophomore class and has a value of $300 a year.

The Toney B. Jackson Scholarship, established by Toney B. Jackson of the Class of 1915, is given in alternate years to a member of the sophomore class and has a value of $300 a year.

The Edgar A. Terrell Scholarship is worth $500 a year for four years. It was made possible by a donation from Edgar A. Terrell, Class of 1915 and is limited to candidates from Mecklenburg County, North Carolina, or, in case there is no qualified candidate, to the geographical boundary of the state of North Carolina.

Category II

Association of Citadel Men Scholarships.—The Association of Citadel Men maintains several scholarships in the amount of $100 to $200 each. The scholarships are awarded for one year only to both entering cadets and upperclassmen.

The Oliver J. Bond Scholarship is supported by the income from a trust fund established by alumni as a memorial to the late Colonel Oliver J. Bond, President of The Citadel, 1908-1931. The present value is $300 a year for four years.

The Star of the West Scholarships were awarded for the first time in 1952. They cover all college expenses and are supported by the income from an anonymous trust fund. These scholarships are available only to students of outstanding ability and attainment without reference to financial need or geographical limitations.

The Summerall Scholarships are supported by the income from a trust fund established by alumni as a memorial to the late General Charles Pelot Summerall, president of The Citadel, 1931-53. At present, there are two scholarships, each worth $500 a year for four years.

Category III

The W. W. Benson Scholarship pays all expenses; it is named in honor of the late Major W. W. Benson, Class of 1907, and is supported by his friends from Greenwood County, South Carolina.

The Citadel Endowment Fund Scholarships consist of several scholarships maintained by The Citadel Endowment Fund from revenue derived from the dividends of life insurance policies voluntarily purchased by members of graduating classes since 1953.

The Mark Clark Scholarship is a $500 scholarship awarded each year to one of the most outstanding members of the rising senior class.

The Consolidated Foods Scholarships are provided by the Consolidated Foods Corporation and pay $500 a year to each of two recipients.

The Daniel Scholarships are derived from the income of a fund donated to The Citadel by R. Hugh Daniel and his brother, the late Charles E. Daniel.

The First Field Artillery Brigade, A.E.F., and the *Fifth Field Artillery*

Scholarships cover all expenses at The Citadel for four years. They were established in 1934 by Colonel Robert R. McCormick of Chicago and are limited to candidates from the State of Illinois.

The P. P. Leventis, Sr., Scholarship covers all college expenses and is supported by the income from a trust fund as a memorial to the late P. P. Leventis, Sr., of Charleston. This scholarship is available to students of outstanding leadership and ability, without reference to financial need or geographical limitations.

The Freddie Levine Scholarship was established from funds contributed by friends of Lieutenant Freddie Levine, who died in the service of his country. It pays $500 a year for four years.

The Broadus R. Littlejohn Scholarship was established in 1963 by Broadus R. Littlejohn, Jr., Class of 1949, in honor of his father. It pays $500 a year for four years.

The Orphanage Fund Committee Scholarships, awarded for the first time in 1959, cover all college expenses for four years. The recipients are limited to high school seniors who are orphans. The Orphanage Fund Committee was started by the Corps of Cadets in 1952 for the purpose of fulfilling certain needs of the children living in the orphanages of Charleston. Excess donations within the Corps of Cadets have resulted in some of the money being set aside for these scholarships.

President's Honorary Scholarships. Each year General Mark W. Clark gives several scholarships to outstanding high school graduates and outstanding members of the current junior, sophomore, and freshman classes of The Citadel. Each scholarship has a value of $200.

The W. A. Rafferty Scholarship is a $500 award given to one of the most outstanding members of the rising senior class.

The Sears, Roebuck Scholarship, worth $1,000 a year for four years, was established by Sears, Roebuck and Company in 1955.

The Summer Camp for Boys Scholarship covers all college expenses and is supported by profits from The Citadel Summer Camp for Boys. There is no restriction as to residence, financial need, or course of study.

The Swig Scholarships are worth $500 each for one year. These two scholarships were made possible by a donation from Mr. Benjamin H. Swig, of San Francisco, California.

The West End Dairy Scholarship was established in 1964 by Greswold Gwynette, Class of 1936, and pays $200 a year.

The Western Electric Scholarship is awarded each year to an outstanding senior majoring in engineering. The value is from $500 to $700.

The General Robert E. Wood Scholarships, valued at $500 a year for four years, were established by General Robert E. Wood, retired chairman, Board of Directors, Sears, Roebuck and Company.

Category IV

There are numerous scholarships of this type. Applicants must apply directly to individual or organization donor. Listed below are a few that have been continuous for many years:

The Charleston City Scholarships are six scholarships maintained by the City of Charleston. Each is worth $500 a year for four years. Appointments are made by the Committee on Ways and Means of the City Council on the basis of a competitive examination. Applicants must be residents of the City of Charleston.

The Cogswell Scholarships of the Washington Light Infantry pay $500 a year for four years and are limited to candidates who are members of the Washington Light Infantry or, in the event no member is qualified, a son of a member of the Washington Light Infantry in good standing.

Post-Courier and *Piedmont-News Scholarships* are awards given by the foundations of these Charleston and Greenville newspapers. They are limited to their carriers who are residents of South Carolina.

Sottile Foundation Scholarships. The Albert Sottile Foundation of Charleston, S. C., in accordance with its policy of furthering educational opportunities, offers several scholarships worth from $100 to $500 a year. Some scholarships are limited to young men in the employ of companies contributing to the Foundation, or to sons of the employees of said companies. Others are limited to Charleston County and appointments are made by the Foundation on the basis of competitive examinations.

Applicants for scholarships need not specify any particular scholarship. All applications will be evaluated and the best applicant selected for the scholarships available. Selections are made on the basis of comparative evaluations of high school records, with all attributes desirable in a well-rounded cadet being considered. Entrance examination scores will be given some weight in the evaluation of an applicant.

The Star of the West, Leventis, and *Summer Camp for Boys Scholarships* were established primarily for the purpose of attracting to The Citadel outstanding young men and are not restricted by either financial need or geographical limitations.

Completed scholarship application forms should be submitted to the Chairman of the Committee on Scholarships prior to March 15. Application for admission to The Citadel must be on file with the Registrar at the time the scholarship application is filed. The Scholarship Committee will screen the applications and make awards by the middle of April. In certain cases, applicants may be asked to appear for a personal interview.

National Defense Student Loans

The Citadel participates in the student loan program established by the National Defense Education Act of 1958.

Both currently enrolled cadets and new cadets who have been accepted for admission may apply for these loans. To be eligible for favorable consideration, applicants must establish financial need and give evidence of likely academic success. In accordance with the law, preference is given those applicants majoring in engineering, sciences, modern languages, or education.

To assist them in determining financial need, The Citadel National Defense Student Loan Committee requires the parents of all applicants to complete the Parents' Confidential Statement published and analyzed by the College Scholarship Service, Princeton, New Jersey. The committee also gives favorable consideration only to those new cadets whose academic promise is above average as shown by their entrance examination and high-school record.

For more detailed information and for loan application forms, one should write to the Registrar, The Citadel.

Academic Honors and Awards

The Scholarship Medal is presented annually by the Board of Visitors to the cadet graduating at the head of his class.

General High Honors are awarded to those cadets in the graduating class whose average academic standing for the four years carries a grade point ratio of 3.60 or higher.

General Honors are awarded to those cadets whose average academic standing for the four years carries a grade point ratio between 3.50 and 3.59, inclusive.

Departmental Honors are awarded on recommendation of heads of departments to those cadets of the graduating class who have established a grade point ratio of 3.50 or better in at least 36 semester hours' work in a department, including all departmental work in the junior and senior years.

The Dean's List is a recognition given to those students registered for eleven or more semester hours whose grade point ratio is 3.00 or higher, with no grade below C, for the work of a semester. Medals are awarded and worn on the uniform the following semester.

Gold Stars are awarded to those students on the Dean's List who have made a grade point ratio of 3.60 or higher for the work of a semester. Stars are worn on the collar of the uniform during the following semester.

The Citadel Honorary Society. Membership in The Citadel Honorary Society is limited to members of the first class whose standing is in the upper eight per cent of their class.

The Francis Marion Cup is awarded by the Rebecca Motte Chapter,

D.A.R., to a cadet of the June graduating class for outstanding achievement in American History.

The Granville T. Prior Award consists of key and scroll presented annually by The Citadel History Club to the student whose first-class essay is selected by a joint faculty committee as the best in the departments of English, History, Modern Languages, and Political Science. It is named in honor of the late head of The Citadel History Department.

William E. Mikell Award, a cash award donated by the late William E. Mikell, is awarded to that member of the graduating class having the highest average in English over a three-year period.

The Wall Street Journal Student Achievement Award is donated by the *Wall Street Journal* and awarded to the student having the greatest achievement in Business Administration during the school year.

The Charles P. Summerall Cup is donated by the European Citadel Association and awarded annually for one year to the company of cadets which makes the greatest improvement in scholastic work during the college year.

The Post-Courier Awards are given by the Post-Courier to the three best writers on *The Brigadier* Staff.

The Peter Gaillard Memorial Award is given annually by Colonel and Mrs. St. Pierre Gaillard in memory of Peter Gaillard of the Class of 1948 to a graduating first classman majoring in electrical engineering on a basis of scholastic attainment, leadership, and participation in extracurricular activities.

The Charles T. Razor Memorial Award is given annually in memory of Colonel Charles T. Razor to a graduating cadet selected by the Head of the Department of Electrical Engineering on the basis of scholastic achievement and ability and willingness to help others.

The Colonel Louis Sheppard LeTellier Award is given annually to a member of the graduating class attaining the highest academic average in Civil Engineering.

Shako Achievement Award — donated by Lieutenant Colonel F. M. Durham and Lieutenant H. B. Alexander and awarded annually to the author of the best poem published in the *Shako* during the academic year.

The George Walker White, Class of 1904, Award is given annually to a member of the graduating class for outstanding achievement in Civil Engineering.

The Colonel Christopher Schultz Gadsden Memorial Award, in memory of Colonel Gadsden, Class of 1852, is given annually to the "Best all around Civil Engineering graduate" as selected by the Civil Engineering faculty.

The Reuben Burton Pitts III, Memorial Award is given annually in

memory of Cadet Reuben Burton Pitts III, Class of 1963, to the graduating first classman who is selected as the friendliest in his class, and the one who has brought the most happiness to other cadets.

The Carlisle Norwood Hastie Award is given annually to the graduating first classman who has been selected by his classmates as having shown the most tact, consideration, and courtesy to his fellow students.

Henry J. Taylor Cup is presented annually to the graduating first classman who has demonstrated the greatest journalistic improvement.

Military Honors and Awards

R.O.T.C. Distinguished Military Student Program — Students whose proficiency in military training and whose qualities of leadership and attention to duty have merited the approbation of the Professor of Military Science are designated Distinguished Military Students.

Distinguished Military Students are eligible to apply for appointment as Second Lieutenants in the Regular Army when they have registered for their last academic year.

Distinguished Air Force Reserve Officer Training Corps (AFROTC) Students and Graduates. The Professor of Air Science (PAS) may appoint as Distinguished AFROTC Students at the start of the second year advanced course of AFROTC, students who have distinguished themselves by displaying outstanding qualities of leadership, adaptability to military training, and academic ability. Students thus selected and appointed may be appointed Distinguished AFROTC Graduates upon graduation provided they have continued to display essential qualities. Distinguished AFROTC Students may apply for an appointment in the Regular Air Force during the first semester of their first class year. Distinguished Air Force ROTC Graduates, who are Distinguished AFROTC Students, who do not apply for appointment in the Regular Air Force in the first semester of their first class year, may apply for Regular Air Force Commissions upon completion of one year active duty and will be given special considerations.

The American Legion School Award is donated annually by the Department of South Carolina American Legion to the graduating first classman displaying conspicuous leadership, citizenship, and true Americanism.

The Commandant's Cup, donated by the late Colonel W. C. Miller, is awarded annually for one year to the best-drilled cadet company.

The 103rd Field Artillery Award was established by the veteran organization of that regiment as a trophy to be won each year by the company of cadets which has attained the best record in discipline.

The J. D. Sehorne Trophy is awarded annually to the platoon winning the platoon drill competition.

The Association of U.S. Army Medal is donated by the Association

of the United States Army and awarded annually to the outstanding Army second class ROTC cadet.

The South Carolina Reserve Officers Association Awards are donated annually by the South Carolina Reserve Officers Association and awarded to both the outstanding army ROTC second class cadet and Air Force ROTC second class cadet for demonstrated leadership ability, moral character, academic, and other activities.

Armed Forces Communications and Electronic Association Awards are donated and awarded annually to both the outstanding Air Force and Army ROTC first-class cadet majoring in electrical engineering.

The South Carolina Sons of American Revolution Awards are donated and awarded annually to the outstanding Army and Air Force first-class cadets selected on the basis of leadership ability, soldierly bearing, and excellence in theoretical studies.

A Certificate of Meritorious Leadership Achievement is awarded annually by the Commanding General, Third United States Army, to a graduating cadet selected on the basis of leadership development throughout his ROTC career.

The Major William M. Hutson Award is presented annually by Colonel and Mrs. J. C. Hutson in memory of their son, Major William M. Hutson, USAF, Class of 1939, to a rising senior selected for outstanding leadership ability, academic standing, and devotion to duty.

The Superior Cadet Decoration Awards are awarded annually by the Department of the Army to the outstanding Army ROTC cadet in each academic class.

The Chicago Tribune Award is presented annually to the outstanding member of each AFROTC class, fourth-class through first class.

The National Defense Transportation Association Award is presented annually to a first-class AFROTC cadet, majoring in business administration, who qualifies for the Air Force specialty of air or surface transportation officer.

The Convair Cadet Award donated by the General Dynamics Corporation, Convair Division, to The Air Science 2 cadet showing outstanding ability in the AFROTC program.

The 444th Fighter Interceptor Squadron Award is awarded to the AFROTC cadet who has displayed the greatest interest in aviation and has shown outstanding qualities of leadership and military aptitude.

The Armor Association Award is given annually to the outstanding graduate commissioned in Armor.

The American Ordnance Association Key is given annually to the outstanding Army first classman commissioned in the Ordnance Corps.

The Air Force Association Award is presented each year to the outstanding first class AFROTC cadet based on the recommendation of the PAS.

The Washington Light Infantry Marksmanship Trophy and Medals consists of a trophy awarded annually for one year to the organization whose team makes the highest score in small-bore rifle marksmanship; silver medals are awarded to the members of the winning team and a gold medal to the cadet making the highest individual score. All are presented by the Washington Light Infantry.

The Wade Hampton Saber is awarded annually by the South Carolina Division, U. D. C., to the member of the first class who is most outstanding in leadership and who makes the greatest contribution to The Citadel while a cadet.

The Star of the West Medal, originally presented to The Citadel by Dr. B. H. Teague, is awarded annually for one year to the best drilled cadet.

The W. C. White Medal is presented annually by Mrs. W. C. White to the captain of the best drilled company.

Daughters of the American Colonists Award is given annually to the first classman with the best disciplinary record during his four years at The Citadel.

Air Force Times Award of Merit is awarded annually to a graduating Air Force ROTC cadet who has distinguished himself by contributing materially to constructive public attention for his cadet Corps.

The Order of Cincinnati Award is awarded annually to a cadet officer who has exemplified in the highest degree the qualities of soldier and citizen.

The Association of Military Colleges and Schools of the United States, The President's Medal is awarded annually to that member of the Corps of Cadets who exemplifies the finest tradition of The Citadel and best represents the end result of its mission.

General Honors and Awards

The Algernon Sydney Sullivan Awards are bronze medallions presented by the college, through the benefaction of the New York Southern Society, to students or others in recognition of high thought and noble endeavor; established by the Society in 1925, the awards have been made to The Citadel since 1933.

The John O. Willson Ring. — The bequest of Dr. John O. Willson, a ring is given annually to the member of the first class voted by his classmates as the manliest, purest, and most courteous member of his class.

The Objectives of The Citadel

The objectives of The Citadel, The Military College of South Carolina, are to offer such courses in the liberal arts and sciences as will develop the minds and characters of the students, increase their likelihood of success in any useful pursuit, and fit them to discharge the duties of citizenship; to provide concentration in certain professional and technical fields which will enable its graduates to compete successfully in business or the professional practice of their specialties; to see that its graduates are adequately equipped in their respective fields of concentration to enter in full standing postgraduate, professional, or technical schools; and to qualify them for commissions in the Armed Forces through participation in a system of military training second only in rigor and thoroughness to that available at the national service academies.

Entrusted with young men at a critical stage of their development, the college seeks also to provide wholesome activities, services, and facilities which will contribute to the development in its students of character, physical fitness, and moral and religious principles, thereby preparing them to meet the requirements of citizens and especially of leaders.

Courses

The course of study is essentially the same for all freshmen except those in engineering, where drawing is taken in place of a modern language. Certain subjects are required in the sophomore year of all students, the remaining subjects being determined by the course which the student is to follow during his junior and senior years. Major work is offered in the following departments: Business Administration, Chemistry, Civil Engineering, Education, Electrical Engineering, English, History, Mathematics, Modern Languages, Physical Education, Physics, and Political Science. A thorough premedical course is also available.

A statement of the courses required each year in each department and a detailed description of the various courses will be found in the following pages.

Grades

A, B, C, and D are passing grades. F represents failure. I represents work of a satisfactory character incomplete for acceptable reasons. Any Citadel student permitted to take courses at another college must earn a grade of C or better for transfer credit. All transfer credits are provisional. If a department involved finds within four weeks after classes begin that the student is not prepared to take a course for which the course transferred is a prerequisite, the allowance or credit is withdrawn, and the student must take the prerequisite course at The Citadel.

Grade reports are mailed to parents or guardians at the end of each semester. Mid-semester reports are sent to parents showing the status of the cadet's academic work at that time.

Changes in schedule must be effected during the first seven days of the term. A subject dropped after the first three weeks will receive a grade of WF.

Promotions

No student will be promoted who is behind more than eight (8) semester hours of his required number of hours at a given period. In addition, for advancement to the second class, a student must have accumulated 115 quality points, and for advancement to the first class, he must have accumulated 190 quality points and completed all the courses of the fourth class and third class which are required in his academic majors, and be able to graduate in two semesters. Exception to this course requirement will be made for the second year in a foreign language required in the third class for those students who transfer from an engineering curriculum at the end of the third-class year.

For purposes of ascertaining quality points and/or grade point ratio (GPR) to determine class standing or promotion, grades are weighted as follows: A, 4 points per semester hour; B, 3 points; C, 2 points; D, 1 point; F, zero points. The total of the weighted grades divided by the total credit hours taken by the student is the grade point ratio (GPR).

Minimum Requirements for Continuance in College

Any full-time student who fails to achieve the following minimum requirements shall be required to withdraw from The Citadel:

(1) Credit hours and quality points:
   (a) at least 18 semester hours credit and 27 quality points in the twelve-month period after entrance.
   (b) at least 21 semester hours credit and 36 quality points in the second, third, and fourth twelve-month periods.
   (c) at least qualified as a second classman at the end of the third twelve-month period.

(2) Number of times student may fail a course:
   (a) A student who has twice failed a semester course in the regular session and has not made up this failure by the subsequent September shall be required to withdraw from The Citadel.
   (b) A student who has failed a semester course three times shall be required to withdraw from The Citadel.

The Academic Dean will notify the parents of the minimum requirements for continuance in college as stated above. This will be done at the time of the mailing of the mid-semester grades for the second semester, which is generally the early part of April. The Registrar will notify, in June, the parents whose sons have failed to meet the minimum standards and state at that time what their sons

will have to do in order to be eligible to return to The Citadel the following September.

Readmission Policy

A student wishing to return to The Citadel, having withdrawn, must file an application for readmission with the Registrar. Action on this application is determined by the Committee on Admissions who will consider not only the applicant's past academic record, but also his suitability as a member of the Corps of Cadets. The recommendation of the Committee on Admissions is to have the approval of the President.

Cadets who withdraw due to academic deficiencies will be ineligible for readmission consideration until the lapse of one semester of the regular school year. (The summer session is not considered a semester in this case.) A cadet who withdraws from The Citadel for academic deficiencies a second time will be ineligible for further readmission consideration.

Any departure from this policy may be made only in cases with extreme extenuating circumstances.

Requirements for Graduation

For graduation a student must complete satisfactorily one of the departmental major courses of study stated in this catalogue. He must also accumulate quality points amounting to twice the number of semester hours required in his course of study. In addition, during his last two years he must accumulate quality points amounting to twice the number of credit hours in those courses required by his department of specialization.

It is also a requisite for graduation that every senior prepare a senior essay on a subject chosen from his field of concentration. This essay is designed as an exercise in the preparation of a formal research paper, measuring up to commonly accepted professional standards, and is wholly apart from the requirements of a particular course in the curriculum. The writing of the senior essay shall be done in residence.

For the sake of uniformity it is recommended that the subject of the senior essay be selected in all departments not later than eight weeks after the opening of college and that the preliminary draft be submitted not more than twenty weeks after the opening of college. The final date for approval of the senior essay shall be two weeks before Commencement.

In addition to the formal credits required for graduation, the candidate must have demonstrated that he is of high character and worthy to receive the diploma of the college. Recommendations for graduation are made by the Academic Board to the Board of Vistiors, who in turn award the degrees.

Degrees

The degree of Bachelor of Arts is conferred upon satisfactory com-

pletion of the English, History, Modern Language, or Political Science programs of study. The degree of Bachelor of Science is conferred upon satisfactory completion of either the Chemistry, Education, Mathematics, Physical Education, Physics, or the Premedical programs.

The degree of Bachelor of Science in Business Administration is awarded to students who complete satisfactorily the course in Business Administration.

Graduates in Civil Engineering receive the degree of Bachelor of Science in Civil Engineering. Graduates in Electrical Engineering receive the degree of Bachelor of Science in Electrical Engineering.

Classification of Cadets

The cadets are arranged in four distinct classes, corresponding with the four years of study. Cadets pursuing the first year's course constitute the Fourth or Freshman Class; those taking the second year's course, the Third or Sophomore Class; those in the third year's course, the Second or Junior Class; and those in the fourth year's course, the First or Senior Class.

Courses of Study

In the following pages will be found a detailed schedule of the curriculum required for each degree according to the major subject elected. The clock hours and the credit value of each course are noted. The individual courses are described under the appropriate departmental heading in the pages following the schedules.

The biology and geology courses are given in the Department of Chemistry; the drawing, in the Department of Civil Engineering; the psychology, philosophy, and sociology, in the Department of Education.

The courses of the fourth class are numbered from 101 *upward, of the third class from* 201 *upward, of the second class from* 301 *upward, and of the first class from* 401 *upward.*

BUSINESS ADMINISTRATION MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	3	2	8	
Fundamental Mathematics	Math. 101,102	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
Economic Origins and Principles	B. Ad. 201	18	3	0	3	
Economic Principles and Problems	B. Ad. 202	18	3	0	3	
Economics of American Industries	B. Ad. 203	18	3	0	3	
Business Psychology	B. Ad. 204	18	3	0	3	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	34
SECOND CLASS						
Acct. Principles and Practices I	B. Ad. 303	18	2	2	3	
Acct. Principles and Practices II	B. Ad. 304	18	2	2	3	
Business Law	B. Ad. 305	18	3	0	3	
Business Organization	B. Ad. 306	18	3	0	3	
Principles of Labor	B. Ad. 307	18	3	0	3	
Marketing	B. Ad. 309	18	3	0	3	
Foreign Trade	B. Ad. 310	18	3	0	3	
Government Finance	B. Ad. 311	18	3	0	3	
Taxation	B. Ad. 312	18	3	0	3	
Business Statistics	B. Ad. 313	18	3	0	3	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	33
FIRST CLASS						
Intermediate Accounting	B. Ad. 400	18	2	2	3	
Corporation Finance	B. Ad. 403	18	3	0	3	
Sales Administration	B. Ad. 405	18	3	0	3	
Money	B. Ad. 407	18	3	0	3	
Banking	B. Ad. 408	18	3	0	3	
Personnel Management	B. Ad. 409	18	3	0	3	
Production	B. Ad. 410	18	3	0	3	
Senior Essay	B. Ad. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	
Departmental Electives (three of the following)						
Industrial Accounting	B. Ad. 401	18	2	2	3	
Advanced Accounting Problems	B. Ad. 402	18	2	2	3	
Investments	B. Ad. 404	18	3	0	3	
Transportation	B. Ad. 406	18	3	0	3	
Insurance	B. Ad. 412	18	3	0	3	35
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CHEMISTRY MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
College Algebra and Trigonometry	Math. 119	18	5	0	5	
Analytic Geometry and Calculus	Math. 121	18	5	0	5	
Survey of American History	Hist. 101,102	36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	32
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phy. 201,202	36	3	2	8	
Intermediate Calculus	Math. 220	18	5	0	5	
Analytic Geometry and Calculus	Math. 122	18	5	0	5	
Qualitative Analysis	Chem. 201	18	3	3	4	
Quantitative Analysis	Chem. 202	18	2	4	4	
Elementary German	Ger. 101, 102	36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	40
SECOND CLASS						
Adv. Quantitative Analysis	Chem. 301	18	2	4	4	
Instrumental Methods	Chem. 302	18	2	4	4	
Organic Chemistry	Chem. 303,304	36	3	3	8	
Chemical Literature	Chem. 308	18	1	0	1	
Physical Chemistry	Chem. 305,306	36	3	3	8	
Scientific German	Ger. 201,202	36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	34
FIRST CLASS						
Inorganic Chemistry	Chem. 401,402	36	3	0	6	
Adv. Topics in Organic Chemistry	Chem. 403,404	36	3	0	6	
Organic Preparations	Chem. 407	18	1	4	3	
Qualitative Organic Analysis	Chem. 408	18	2	4	4	
Physical Chemistry Topics	Chem. 411	18	3	0	3	
Inorganic Preparations	Chem. 412	18	1	2	2	
Elective		36	3	0	6	
Senior Essay	Chem. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	35
						139

CIVIL ENGINEERING

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
College Algebra and Trigonometry	Math. 119	18	5	0	5	
Analytic Geometry and Calculus	Math. 121	18	5	0	5	
Graphic Science	C.E. 101,102	36	0	4	4	
Survey of American History	Hist. 101,102	36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	36
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phys. 201,202	36	3	2	8	
Analytic Geometry and Calculus	Math. 122	18	5	0	5	
Intermediate Calculus	Math. 220	18	5	0	5	
Non-Technical Elective		18	3	0	3	
Statics	C.E. 202	18	3	2	4	
Photogrammetry	C.E. 204	18	0	2	1	
Surveying	C.E. 205,206	36	3	2	8	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	42
SECOND CLASS						
Dynamics	C.E. 301	18	3	0	3	
Mechanics of Materials	C.E. 303	18	4	0	4	
Mechanics of Materials	C.E. 304	18	3	0	3	
Highway Engineering	C.E. 305	18	3	0	3	
Highway Engineering	C.E. 306	18	2	2	3	
Materials Laboratory	C.E. 307	18	0	3	1	
Structural Analysis I	C.E. 308	18	2	2	3	
Engineering Law and Spec's.	C.E. 310	18	3	0	3	
Engineering Geology	Geol. 303	18	3	2	4	
Electrical Engineering	E.E. 308	18	3	2	4	
Non-Technical Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	40
FIRST CLASS						
Concrete Laboratory	C.E. 401	18	1	2	2	
Soil Mechanics Laboratory	C.E. 402	18	1	2	2	
Reinforced Concrete	C.E. 403,404	36	3	0	6	
Structural Analysis II	C.E. 405	18	3	2	4	
Steel Design	C.E. 406	18	3	2	4	
Fluid Mechanics	C.E. 407	18	3	2	4	
Sanitary Engineering	C.E. 408	18	2	2	3	
Soil Mechanics and Foundations	C.E. 409,410	36	3	0	6	
Senior Essay	C.E. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	36
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EDUCATION MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	3	2	8	
Fundamental Mathematics	Math. 101,102	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
Elementary Biology	Biol. 201,202	36	2	4	8	
Survey of European Civilization	Hist. 201,202	36	3	0	6	
Social Science Elective (Other than History)		18	3	0	3	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	39
SECOND CLASS						
Philosophy of Education	Ed. 301	18	3	0	3	
Educational Psychology	Psy. 302	18	3	0	3	
Personal and Community Health	Ph. Ed. 301	18	3	0	3	
Music Appreciation	Art 305	18	3	0	3	
Art Appreciation	Art 306	18	3	0	3	
Guidance	Ed. 303	18	3	0	3	
Public Speaking	Engl. 205	18	3	0	3	
Elective Subject student expects to teach		36	3	0	6	
Elective Subject student expects to teach		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	36
FIRST CLASS						
Directed Teaching	Ed. 400	18			6	
Methods and Materials of Secondary School Teaching	Ed. 401	18		0	3	
Psychology of Adolescence	Psy. 401	18	3	0	3	
Seminar in Secondary Education	Ed. 403	18	3	0	3	
Educational Tests & Measurements	Ed. 406	18	3	0	3	
Social Science Elective (Other than History)		18	3	0	3	
Elective Subject student expects to teach		36	3	0	6	
Senior Essay	Ed. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	32
						141

ELECTRICAL ENGINEERING

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
College Algebra & Trigonometry	Math. 119	18	5	0	5	
Analytic Geometry and Calculus	Math. 121	18	5	0	5	
Survey of American History	Hist. 101,102	36	3	0	6	
Graphic Science	C.E. 101,102	36	0	4	4	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	36
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Physics	Phys. 201,202	36	3	2	8	
Analytic Geometry and Calculus	Math. 122	18	5	0	5	
Intermediate Calculus	Math. 220	18	5	0	5	
Introduction to E.E.	E.E. 201,202	36	3	0	6	
Computer Programming	E.E. 203	18	1	0	1	
Elective		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	39
SECOND CLASS						
Advanced Calculus	Math. 321,322	36	3	0	6	
Advanced General Physics	Phys. 301,302	36	3	0	6	
Elec. Engr. Circuits	E.E. 309	18	5	2	6	
Electrical Machinery	E.E. 310	18	5	2	6	
Introduction to Electronics	E.E. 305,306	36	3	0	6	
Public Speaking	Engl. 205	18	3	0	3	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	36
FIRST CLASS						
Electronic Circuits, Systems	E.E. 401,402	36	3	2	8	
Electrical Measurements	E.E. 405	18	3	2	4	
Circuit Networks	E.E. 413,414	36	3	0	6	
Electromagnetic Theory	E.E. 417,418	36	3	0	6	
Automatic Control Systems	E.E. 415,416	36	3	0	6	
Electronic Computers	E.E. 422	18	3	0	3	
Senior Essay	E.E. 420	18	0	4	2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	38
						149

ENGLISH MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	3	2	8	
Fundamental Mathematics	Math. 101,102	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language	French or German 101,102	36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
European Civilization since 1500	Hist. 201,202	36	3	0	6	
The English Language	Engl. 203,204	36	3	0	6	
A Modern Language	French or German 201,202	36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	34
SECOND CLASS						
Chaucer	Engl. 301	18	3	0	3	
Milton	Engl. 400	18	3	0	3	
English Electives		36	3	0	6	
English Electives		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.		36	3	0	3	33
FIRST CLASS						
Shakespeare	Engl. 401,402	36	3	0	6	
American Literature	Engl. 403,404	36	3	0	6	
English electives		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	Engl. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	35
						136

HISTORY MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
Fundamental Mathematics	Math. 101,102	36	3	0	6	
Introduction to General Chemistry	Chem. 103,104	36	3	2	8	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
European Civilization since 1500	Hist. 201,202	36	3	0	6	
American National Government	Polit. 201	18	3	0	3	
State and Local Government	Polit. 202	18	3	0	3	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	34
SECOND CLASS						
History of England	Hist. 301,302	36	3	0	6	
United States since 1900, or	Hist. 303,304	36	3	0	6	
Europe since 1870, or	Hist. 305,306	36	3	0		
Social and Intellectual History of the United States	Hist. 313,314	36	3	0		
Economic Foundations of Mod. Life	Polit. 307,308	36	3	0	6	
A one-semester History course		18	3	0	3	
Elective		18	3	0	3	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	33
FIRST CLASS						
American Diplomatic History, or	Hist. 401,402	36	3	0	6	
Latin American History, or	Hist. 403,404	36	3	0		
Far East and Modern Russia	Hist. 409,410	36	3	0		
Colonial America, or	Hist. 405,406	36	3	0	6	
Ancient World and Middle Ages	Hist. 407,408	36	3	0		
International Politics, or	Polit. 405,406	36	3	0	6	
Constitutional Law	Polit. 401,402	36	3	0		
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	Hist. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	35
						136

MATHEMATICS MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
College Algebra and Trigonometry	Math. 119	18	5	0	5	
Analytic Geometry and Calculus	Math. 121	18	5	0	5	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	32
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phys. 201,202	36	3	2	8	
Analytic Geometry and Calculus	Math. 122	18	5	0	5	
Intermediate Calculus	Math. 220	18	5	0	0	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	38
SECOND CLASS						
Advanced Calculus	Math. 321, 322	36	3	0	6	
Advanced Mathematics		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	33
FIRST CLASS						
Advanced Mathematics		36	3	0	6	
Advanced Mathematics		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	Math. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	35
						138

MODERN LANGUAGE MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	3	2	8	
Fundamental Mathematics	Math. 101,102	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language	101,102/201,202	36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
European Civilization since 1500	Hist. 201,202	36	3	0	6	
Major Modern Language	201,202/301,302	36	3	0	6	
A Second Modern Language						
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	34
SECOND CLASS						
Cont. of Second Modern Language		36	3	0	6	
Major Modern Language	301,302, or	36	3	0	6	
Elective in Major Modern Language)		36	3	0		
Elective in Major Modern Language		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	33
FIRST CLASS						
Cont. of Second Modern Language		36	3	0	6	
Elective in Major Modern Language		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	35
						136

PHYSICAL EDUCATION MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	3	2	8	
Fundamental Mathematics	Math. 101,102	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
Elementary Biology	Biol. 201,202	36	2	4	8	
Introduction to Physical Education	Ph. Ed. 201	18	3	0	3	
Individual and Dual Sports	Ph. Ed. 204	18	3	0	3	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	36
SECOND CLASS						
Philosophy of Education	Ed. 301	18	3	0	3	
Educational Tests and Measurements	Ed. 406	18	3	0	3	
Anatomy	Biol. 303	18	3	0	3	
Physiology	Biol. 304	18	3	0	3	
Personal and Community Health	Ph. Ed. 301	18	3	0	3	
Basketball Theory	Ph. Ed. 303	18	1	2	2	
Gymnastics and Tumbling	Ph. Ed. 308	18	1	2	2	
Music Appreciation	Art 305	18	3	0	3	
Art Appreciation	Art 306	18	3	0	3	
Elective		36	3	0	6	
Elective		18	3	0	3	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	37
FIRST CLASS						
Organization and Administration of Physical Education	Ph. Ed. 401	18	3	0	3	
Psychology of Adolescence	Psy. 401	18	3	0	3	
Health Education	Ph. Ed. 405	18	3	0	3	
Football Theory	Ph. Ed. 407	18	2	0	2	
Directed Teaching	Ed. 400	18			6	
Methods and Materials of Secondary School Teaching	Ed. 401	18	3	0	3	
Individual Physical Education	Ph. Ed. 404	18	3	0	3	
Spring Sports	Ph. Ed. 406	18	2	2	3	
Tests and Measurements in Physical Education	Ph. Ed. 412	18	2	0	2	
Kinesiology	Ph. Ed. 414	18	2	0	2	
Senior Essay	Ph. Ed. 420				2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	35
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PHYSICS MAJOR

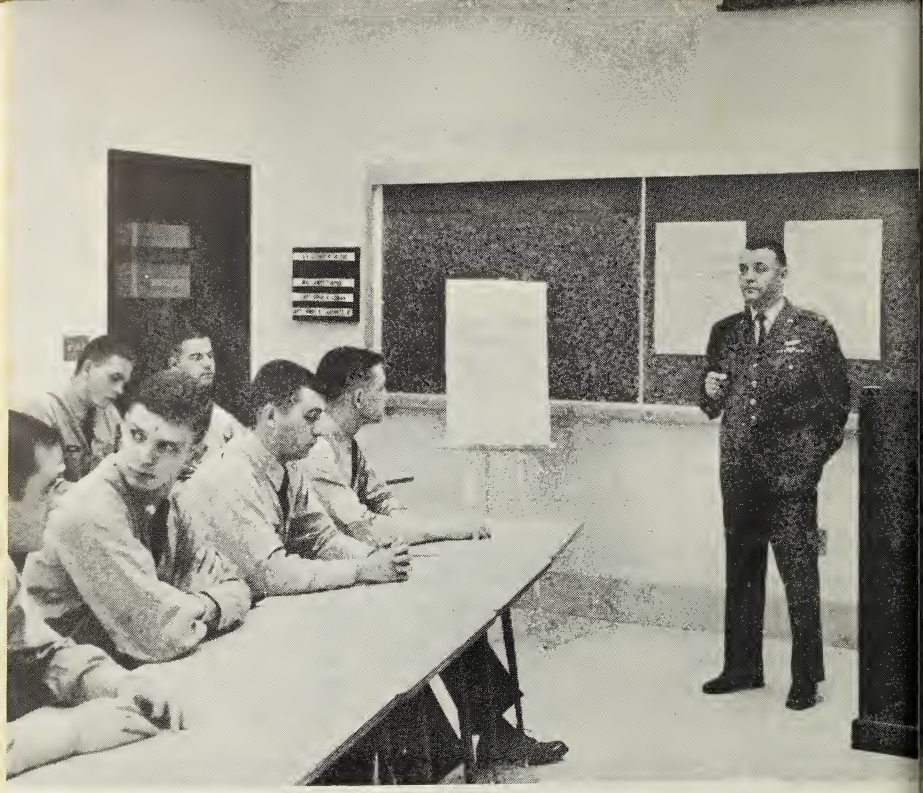
Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
or	Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
College Algebra and Trigonometry	Math. 119	18	5	0	5	
Analytic Geometry and Calculus	Math. 121	18	5	0	5	
German or	Ger. 101,102	36	3	0	6	
Graphic Science	C.E. 101,102	36	0	4	(4)	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	30 or 32
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phy. 201,202	36	3	2	8	
Analytic Geometry and Calculus	Math. 122	18	5	0	5	
Intermediate Calculus	Math. 220	18	5	0	5	
Survey of American History	Hist. 101,102	36	3	0	6	
Scientific German	Ger. 201,202	36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	38
SECOND CLASS						
Advanced Calculus	Math. 321,322	36	3	0	6	
Advanced General Physics	Phys. 301,302	36	3	0	6	
Laboratory Physics	Phys. 303,304	36	0	4	4	
Geometrical Optics	Phys. 307	18	2	2	3	
Physical Optics	Phys. 308	18	2	2	3	
Heat and Thermodynamics	Phys. 310	18	3	0	3	
Elective		36	3	0	6	
Elective		18	3	0	3	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	37
FIRST CLASS						
Modern Physics	Phys. 401	18	3	0	3	
Nuclear Physics	Phys. 402	18	3	0	3	
Adv. Laboratory Physics	Phys. 403,404	36	0	2	2	
Electricity and Magnetism	Phys. 413	18	3	4	5	
Electronics	Phys. 406	18	3	4	5	
Mechanics	Phys. 407	18	4	0	4	
Elective		36	3	0	6	
Senior Essay	Phys. 420				2	
2nd Year Advanced R.O.T.C.		36	3	0	3	33
						138 or 140

POLITICAL SCIENCE MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	3	2	8	
Fundamental Mathematics	Math. 101,102	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
European Civilization since 1500	Hist. 201,202	36	3	0	6	
American National Government	Polit. 201	18	3	0	3	
State and Local Government	Polit. 202	18	3	0	3	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	34
SECOND CLASS						
International Law & Organization	Polit. 301,302	36	3	0	6	
American Foreign Relations	Polit. 303	18	3	0	3	
American Parties and Politics	Polit. 304	18	3	0	3	
Public Aministration	Polit. 305,306	36	3	0	6	
Econ. Foundations of Modern Life	Polit. 307,308	36	3	0	6	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	33
FIRST CLASS						
Constitutional Law	Polit. 401,402	36	3	0	6	
Government Finance	Polit. 403	18	3	0	3	
International Politics	Polit. 405,406	36	3	0	6	
Political Theory	Polit. 407,408	36	3	0	6	
Elective		36	3	0	6	
Elective		18	3	0	3	
Senior Essay	Polit. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	35
						136

PREMEDICAL COURSE

Subject	Course No.	No. of Weeks	Clock Hrs. a week Lec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
Fundamental Mathematics	Math. 101,102	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
German or French		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	0	2	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
Qualitative Analysis	Chem. 201	18	3	3	4	
Quantitative Analysis	Chem. 202	18	2	4	4	
Elementary Biology	Biol. 201,202	36	2	4	8	
German or French		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	0	2	38
SECOND CLASS						
Comparative Anatomy	Biol. 301,302	36	2	4	8	
Organic Chemistry	Chem. 303,304	36	3	3	8	
Physics for Premedical Students	Phys. 305,306	36	2	2	6	
General Psychology	Psych. 301	18	3	0	3	
Abnormal Psychology	Psych. 304	18	3	0	3	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	3	0	3	37
FIRST CLASS						
Embryology	Biol. 401	18	2	4	4	
Adv. Topics in Organic Chemistry	Chem. 403	18	3	0	3	
Physical Chemistry for Premeds	Chem. 406	18	3	0	3	
Elective		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	Chem. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	3	0	3	33
						142



DEPARTMENT OF AEROSPACE STUDIES

Professor of Aerospace Studies: Taylor
Assistant Professors of Aerospace Studies: Boyce, Cuthbertson, Ward, Way, Adrian, Gilmore, Kirby, Landreth, Sotire, Weickhardt

The Department of Aerospace Studies is responsible for the operations of the Air Force ROTC Program at The Citadel. The purpose and specific objectives of this program are to select and motivate cadets who desire to serve as career Air Force officers in fields as specifically required by the United States Air Force; to develop in cadets by precept, example, and participation the attributes of character, personality, and attitudes essential for leadership; and to provide that military education and training that will develop skills and attitudes vital to a career professional Air Force officer.

All students at The Citadel are required by South Carolina law to take four years of either Army or Air Force ROTC; however, not all cadets earn the privilege of being commissioned an officer in the Armed Forces.

Cadets who meet all the qualifications may be formally enrolled in AFROTC and offered a commission upon graduation. Others not formally enrolled will continue to take AFROTC for academic credit. Outstanding cadets designated as Distinguished Air Force Cadets may

apply for a Regular Air Force Commission during their First Class (Senior) Year.

The AFROTC course of instruction is divided into two parts. The first two years comprise Basic Training and the last two years, including field training at an Air Force Base, comprise the Advanced Training, which provides retainer pay at the rate of $40 per month not to exceed 20 months. All Basic students are required to apply for Advanced Training.

Financial Assistance Program - Scholarships

Cadets selected through a national screening and testing program and specifically appointed by the Department of the Air Force to receive a scholarship will be provided retainer pay at the rate of $50 a month beginning on the day that they start their first day of college work and ending upon the completion of their instruction, but not for more than four years. The Department of the Air Force may also provide additional financial assistance including fees, books, and laboratory expenses. For further details on the scholarship program, contact the Professor of Aerospace Studies. For details on pay and allowances, see page 67.

Formal Enrollment Requirements

Basic Course

1. Being a citizen of the United States.
2. Being physically qualified. The most frequent disqualifying item is failure to meet vision standards. Some minimum acceptable vision standards are: Pilot, 20/20 uncorrected in both eyes; navigator, 20/50 correctable to 20/20 in both eyes; non-rated, 20/400 correctable to 20/30 in one eye and 20/40 in the other.
3. Maintaining satisfactory academic standards.
4. Having good moral character. (Convictions by civil or military court for offenses other than minor traffic violations are disqualifying; excessive minor traffic violations may also cause disqualification.)
5. Signing a certificate of loyalty to the United State Government.

Advanced Training (Selection Competitive)

1. Completion of the Basic Course.
2. Passing the physical requirements.
3. Passing Air Force Officer Qualification Test (AFOQT).
4. Contracting to serve on active duty for five years if qualified for pilot or navigator. Other categories are for four years.
5. Enlisting in the Enlisted Reserve of the Air Force for a specified period of time. A cadet who is selected for Advanced Training under this program who willfully evades the terms of his Advanced Course contract, or who completes the course but declines to accept a commission when offered, may be ordered to active duty by the Secretary of the Air Force to serve in his enlisted

grade for a period not to exceed two or four years depending on whether or not the cadet is enrolled under the financial assistance program. Under the latter program enlisted service may extend to four years.

6. Maintaining satisfactory academic standards and graduating with class.

If not physically qualified for pilot or navigator, a cadet may qualify for a commission in a technical or non-technical area depending on his academic major.

Course of Instruction

Aerospace Studies 100. *World Military Systems* Two Credit Hours
(Freshman Year)

An introductory course exploring the causes of the present world conflict, the role and relationship of military power to that conflict, and the responsibility of an Air Force officer.

The course begins with a discussion of the factors from which differing political philosophies have evolved. It continues with a tri-dimensional analysis of the three prime political philosophies which have guided segments of society in the twentieth century. This is followed by a discussion of the means that nations develop to pursue their objectives and how they confront each other in the use of these means. The course then treats individual military systems with emphasis upon the U. S. Department of Defense and the U. S. Air Force. An average of not less than two classroom hours per week for the full academic year.

Aerospace Studies 200. *World Military Systems* Two Credit Hours
(Sophomore Year)

Aerospace Studies 200 continues the study of world military forces and the political-military issues surrounding the existence of these forces. This includes a study of the United States Army, and the United States Navy, their doctrines, missions and employment concepts; a study of the military forces of NATO, CENTO, SEATO, and their role in Free World security; and an investigation of the military forces of the USSR, the Soviet Satellite Armies, and the Chinese Communist Army. The Aerospace Studies 200 phase concludes with an analysis of the trends and implications of world military power. An average of not less than two classroom hours per week for the full academic year.

Aerospace Studies 300. *Growth and Development of Aerospace Power* Three Credit Hours
(Junior Year)

A survey course about the nature of war; development of airpower in the United States; mission and organization of the Defense Department; Air Force concepts, doctrine, and employment; astronautics and space operations; and the future development of aerospace power.

Includes the United States space programs, vehicles, systems, and problems in space exploration. Three class hours per week are required.

Aerospace Studies 400. *The Professional Officer* Three Credit Hours (Senior Year)

A study of professionalism, leadership, and management. Includes the meaning of professionalism, professional responsibilities, the military justice system, leadership theory, functions and practices, management principles and functions, problem solving, and management tools, practices and controls. Three class hours per week are required.

Field Training

For further practical instruction of cadets in the Aerospace Studies Program, special field training will be prescribed during the period of Advanced Training. The special field training must be completed as a prerequisite to commissioning.

ROTC ALLOWANCES

Uniform Allowances

Students formally enrolled (see pages 97 or 146 for particulars) in Military or Aerospace Studies I and II are paid by the Government $25 per semester as a uniform allowance. Fourth Classmen (freshmen) and Third Classmen (sophomores) must be enrolled at least through the sixth week to receive this allowance. Students formally enrolled in the Advanced Course are paid $50 per semester as a uniform allowance. The above uniform allowances are not paid directly to the students but are credited to the students' Quartermaster accounts.

Retainer Pay

A cadet selected for Advanced Training will be provided retainer pay at the rate of $40 per month beginning on the day he starts advanced training and ending upon the completion of his instruction, but in no event shall any cadet receive such pay for more than twenty months.

Financial Assistance Program - Scholarship

Cadets selected through a national screening and testing program and specifically appointed by the Department of the Army or Department of the Air Force to receive a scholarship will be provided retainer pay at the rate of $50 a month beginning on the day that they start their first day of college work and ending upon the completion of their instruction, but not for more than four years. The Departments of the Army and Air Force may also provide additional financial assistance including fees, books, and laboratory expenses.

(For further details on the scholarship program, contact either the Professor of Military Science or Professor of Aerospace Studies.)

Field Training

Students formally enrolled in either the Army or Air Force ROTC Program must attend a field training camp during their Advanced

Course. At this camp students receive the pay rate of a federal academy cadet ($120.60 per month) while attending, plus travel pay to and from camp computed at the rate of six cents per mile. During the camp period retainer pay is not paid.

Summary of Estimated ROTC Allowances

(Non-Scholarship Cadet)

Fourth Class Year (Freshmen) (formally enrolled):
Commutation of Uniform Allowance $50.00

TOTAL $50.00

Third Class Year (Sophomores) (formally enrolled):
Commutation of Uniform Allowance $50.00

TOTAL $50.00

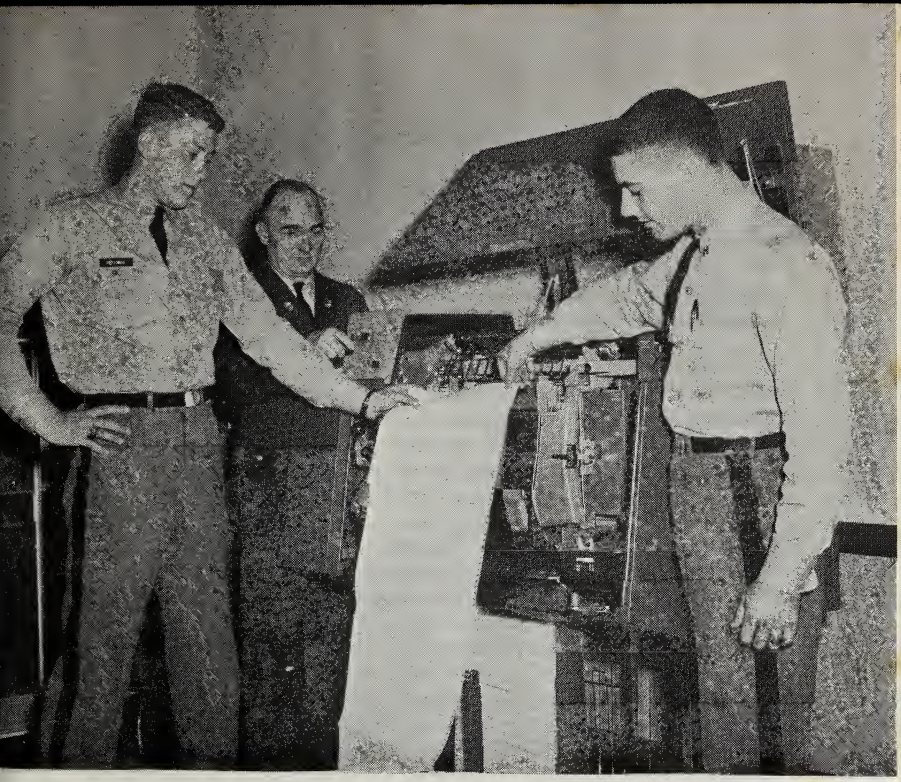
Second Class Year (Juniors) (formally enrolled):
Commutation of Uniform Allowance $100.00
Retainer Pay (estimate) $400.00

TOTAL $500.00

First Class Year (Seniors) (formally enrolled):
Commutation of Uniform Allowance $100.00
Retainer Pay (estimate) $400.00

TOTAL $500.00

Field Training:
Air Force - Pay of a federal academy cadet (four wks.).... $120.60
Army - Pay of a federal academy cadet (six wks.) $180.00
Travel - six cents a mile to and from camp (formally enrolled) $———



DEPARTMENT OF BUSINESS ADMINISTRATION

Professors: Adden, Tibbetts, Mettler
Associate Professors: Debnam, Young, Infinger, Kuhlman
Assistant Professors: Lucas, Wilson, Masters, Bunch, Stockton, Whitney, Phillips, Marjenhoff, Thornton, McNerney, Dawson

Modern business has become so large in the size of industrial units and so complex in organization that a mastery of its theory and practice can no longer be acquired through apprenticeship. Today no single industry or business can give so adequate a training to its beginners as can be obtained in the department of business administration of a good college. Such college training is now considered the best method of equipping a man for success as a business and economic leader.

The purpose of the Department of Business Administration is to prepare the student to take his place in a business enterprise with such general knowledge of business that he can forego many of the years of experience which would be required of an apprentice, to prepare him to enter in full standing the graduate schools of business administration, to pursue further professional business studies, and to take his place in economic society as does a professional man in other fields

of endeavor with sufficient knowledge to make sound decisions on economic problems.

The courses described below are not all pure business courses; rather they are designed to offer instruction in subjects commonly given in schools of arts and science, in schools of social science, and in schools of business administration.

201. *Economic Origins and Principles* Three Credit Hours
Required of all Business Administration Sophomores.
A study of the origins of capitalism and the development of economic institutions; an introduction to economic principles, including an analysis of supply and demand and of the pricing process under various forms of competition.

202. *Economic Principles and Problems* Three Credit Hours
Required of all Business Administration Sophomores.
A study of income distribution, money and banking, government finance, international economic relations; the problems of labor, agriculture, transportation, large-scale production, and other contemporary economic problems.
Prerequisite: B. Ad. 201.

203. *Economics of American Industries* Three Credit Hours
Required of all Business Administration Sophomores.
A study of how wealth comes into existence from raw materials; the location, the quantity, the quality, the values before and after manufacturing; manufacturing processes; relative importance to economic society.

204. *Business Psychology*
Required of all Business Administration Sophomores.
Applied psychology as an aid to the business executive; statistical measures as an aid to the psychologist; vocational psychology; industrial psychology, including an understanding of employee behavior patterns through the adjustment concept, psychological testing, selection, and performance appraisal.

303. *Accounting Principles and Practice* I Three Credit Hours
Required of all Business Administration Juniors.
A study of the fundamentals of accounting, including the analysis and recording of business transactions and the preparation of financial statements; practical problems given in the laboratory. Lecture: two hours; laboratory: two hours.

304. *Accounting Principles and Practice* II Three Credit Hours
Required of all Business Administration Juniors.
A continuation of B. Ad. 303 with emphasis on partnerships, corporations, cost accounting theory, modern methods of data processing, and the Statement of Sources and Application of Funds. Lecture:

two hours; laboratory: two hours.
Prerequisite: B. Ad. 303.

305. *Business Law* Three Credit Hours
Required of all Business Administration Juniors.
A study of the law as it relates to business, including contracts, agency, negotiable instruments, sales, bailments, and personal and real property; class discussion of court procedure, cases, and decisions.
Prerequisite: B. Ad. 202.

306. *Business Organization* Three Credit Hours
Required of all Business Administration Juniors.
The legal relations of a business unit; kind of organization best adapted to various sorts of business activity; internal organization for maximum efficiency; the legal nature of mortgages, bonds, stocks; a study of combinations as administrative units.
Prerequisites: B. Ad. 303 and 305.

307. *Principles of Labor* Three Credit Hours
Required of all Business Administration Juniors.
An analysis of the worker's position in modern industry and the effects of industrial production on the worker's social position; introduction to the problems of wages, hours, working conditions, child labor, industrial accidents, unemployment, trade unions, and collective bargaining; economic problems of the worker under current labor legislation.
Prerequisite: B. Ad. 202.

309. *Marketing* Three Credit Hours
Required of all Business Administration Juniors.
The activities necessary to effect the distribution of goods from producer to consumer, consumption and consumer behavior, the marketing institutions, the marketing functions, examination of important marketing policy and problem areas.
Prerequisites: B. Ad. 202 and 203.

310. *Foreign Trade* Three Credit Hours
Required of all Business Administration Juniors.
The channels of distribution used in exporting and importing, the theory of international trade, foreign trade promotion activities; the commercial organization and policies governing foreign trade practices; trade methods and problems; financial arrangements.
Prerequisite: B. Ad. 202.

311. *Government Finance* Three Credit Hours
Required of all Business Administration Juniors.
A study from the point of view of the businessman of the amount and purposes of government expenditures; scope of government financial activity; public budgets; principles of public borrowing; sources of revenue; theories of tax distribution; general principles and practices of

property taxes, commodity taxes, income taxes, corporation and other business taxes.
Prerequisite: B. Ad. 202.

312. *Taxation* Three Credit Hours
Required of all Business Administration Juniors.
A study of the basic principles of income taxation, including a thorough analysis of the present federal law dealing both with persons and corporations.
Prerequisite: B. Ad. 303.

313. *Business Statistics* Three Credit Hours
Required of all Business Administration Juniors.
A study of the basic theory and methodology of statistics as applied to economic and business situations, including the sources and collection of data, tabular and graphic presentation, and the interpretation and criticism of statistical data.
Prerequisite: Completion of Required Freshman Mathematics.

400. *Intermediate Accounting* Three Credit Hours
Required of all Business Administration Seniors.
An analysis of the balance sheet and the income statement with particular emphasis on the technique of evaluation of items comprising these statements; practical problems given in the laboratory.
Lecture: two hours; laboratory: two hours.
Prerequisite: B. Ad. 304.

401. *Industrial Accounting* Three Credit Hours
Elective for Business Administration majors and others with the necessary prerequisites.
A course in the principles of industrial accounting, including the accounting for materials, labor, and overhead under the job-order, process, and standard cost systems; practical problems given in the laboratory.
Lecture: two hours; laboratory: two hours.
Prerequisite: B. Ad. 400.

402. *Advanced Accounting Problems* Three Credit Hours
Elective for Business Administrative majors and others with the necessary prerequisites.
A study of advanced accounting problems, including the technical procedures in the organization and liquidation of partnerships; special problems in mergers and consolidations, estates, trusts, and receiverships; practice problems done in the laboratory. Lecture: two hours; laboratory: two hours.
Prerequisite: B. Ad. 400.

403. *Corporation Finance* Three Credit Hours
Required of all Business Administration Seniors.
A survey of corporate financial policies and methods of planning and

control; an analysis of factors affecting the capital structure of corporations and the proper use of different types of securities; management decision-making and control through use of budgetary procedures.
Prerequisites: B. Ad. 304 and 306.

404. *Investments* Three Credit Hours
Elective for Business Administrative majors and others with the necessary prerequisites.
A study in personal finance and security analysis; buying and selling procedure; stock exchanges; and the relative merits of the various types of securities as an investment or speculation.
Prerequisites: B. Ad. 304 and 403.

405. *Sales Administration* Three Credit Hours
Required of all Business Administration Seniors.
Marketing management primarily for the manufacturer; planning the product; planning for promotion; investigation of the market; pricing and price policy; planning the sales organization; management of sales personnel.
Prerequisite: B. Ad. 309.

406. *Transportation* Three Credit Hours
Elective for Business Administration majors and others with the necessary prerequisites.
A study of the history, geography, and economics of all forms of transportation; transport pricing; public regulation; public policy; current problems such as competition between modes of transportation.
Prerequisite: B. Ad. 405.

407. *Money* Three Credit Hours
Required of all Business Administration Seniors.
The nature and functions of money; the various monetary standards; the development of our monetary system; the factors affecting the value of money; methods and objectives of money and credit control; international exchange; analysis of recent development in money and credit.
Prerequisite: B. Ad. 202.

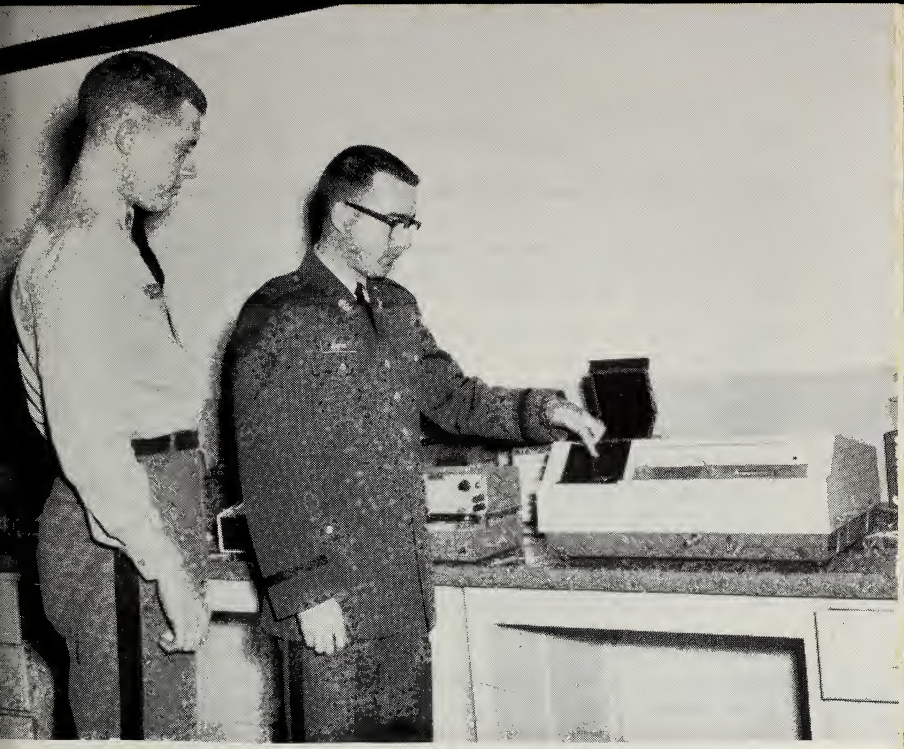
408. *Banking* Three Credit Hours
Required of all Business Administration Seniors.
A study of the functions, management and operation of commercial banks; the development of banking in the United States; the policies of the Federal Reserve Banks as they relate to the volume of physical production, the national income, and the price level; the relation between commercial banks and investment institutions; organization, operation, and economic effects of the Federal Reserve System; effects of recent changes in banking.
Prerequisite: B. Ad. 407.

409. *Personnel Management* Three Credit Hours
Required of all Business Administration Seniors.
The principles and practices in the management of employees; introducing positive stimuli into industrial endeavors and promoting the industrial efficiency of labor, treating such factors as selection and placement, training programs, job analysis, labor turnover, merit rating, job evaluation, and wage analysis.
Prerequisite: B. Ad. 307.

410. *Production* Three Credit Hours
Required of all Business Administration Seniors.
The problems of the production manager; location and design of plants; internal and external transportation; inventory control; methods of measuring activities of personnel; incentives, efficiencies, budgets, and organization.
Prerequisites: B. Ad. 202, 304 and 313.

412. *General Insurance* Three Credit Hours
Elective for Business Administration majors and others.
A course in predictable business risks and the methods of minimizing these risks through insurance, intelligent planning of a program of coverages, and rates of life, fire, casualty, marine insurance, and fidelity and surety bonds.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 81.



DEPARTMENT OF CHEMISTRY

Professors: Wideman, Metcalf, Wilkinson

Associate Professors: Hummers, Ballentine, Clark, Boase, Jumper, Timmerman

Assistant Professors: Durkee, Henderson, Browning, Medbery, Leopold, Dunmire, Wagener

The objectives of this department are to offer to all freshmen majoring in the sciences or in engineering a course in the fundamentals of general chemistry and to freshmen majoring in the arts a course in the introduction to general chemistry, to provide (for students majoring in chemistry) a course of study which will meet the educational requirements of the American Chemical Society for the professional chemist, and to afford to premedical and predental students adequate preparation for admission to standard professional schools.

Chemistry Major

The course of study for students majoring in chemistry is designed to prepare them to fill positions as chemists in commercial laboratories or as control chemists in industrial plants, and to provide the basic training for them to enroll as graduate students in full standing at the leading universities.

The courses of study embody training in the four fundamental sub-

divisions of the science: inorganic, organic, analytical, and physical chemistry.

The department occupies ten commodious laboratories, eleven lecture rooms, and one large lecture and demonstration room, all located in the west wing of Bond Hall. The laboratories are equipped with modern apparatus and are well adapted to the work.

The department maintains a centrally-located library with well selected reference books and scientific journals. A number of the journals of the American Chemical Society may be found on the shelves of the reading room. Current periodicals and scientific magazines are kept up to date on the reading room tables.

A chapter of Student Affiliates of the American Chemical Society is active at The Citadel.

Students majoring in chemistry are required to take all of the courses offered by the department for Chemistry Majors and also Mathematics 119, 121, 122 and 220; German 101, 102 and 201, 202; and Physics 201, 202.

Premedical Major

The sequence of courses offered to students majoring in premedicine is based upon the requirements of the Association of American Medical Colleges for admission to a standard medical college. A student must not only complete certain prescribed work for admission to a medical college but must show also an aptitude for medical studies. The Medical Aptitude Test, prepared by the Association of American Medical Colleges, must be taken by all students who expect to apply for admission to a medical college.

Students who desire to prepare themselves for the study of dentistry, pharmacology, veterinary medicine, or other biological sciences are urged to pursue the premedical course of study.

After one year in the regular premedical program, unusually well qualified students who wish to apply for early admission to dental, medical, pharmacological, or veterinary medical schools may arrange a special program, subject to approval by the department head. This program would be planned to meet the minmium requirements of the particular professional school to which early application is to be made.

Students are cautioned that the professional schools impose higher than normal admission standards upon applicants from the sophomore or junior class levels. Further, if admission is not achieved, it may be difficult to schedule a program of study to meet the requirements for graduation in the normal four years.

Students taking the Premedical Elective course are required to take Chemistry 101, 102, 201, 202, 303, 304, 403, and 406; Mathematics 101, 102; Physics 203, 204 and 305, 306; German or French 101, 102 and 201, 202; English 101, 102, 201, 202; Psychology 301, 304; and Bi-

ology 201, 202, 301, 302, and 401. Chemistry 405, Biology 402 and 404 are recommended electives.

101, 102. *General Chemistry* Eight Credit Hours
Required of all freshmen majoring in the sciences, engineering, or mathematics.
Theoretical and descriptive chemistry, including the elements of modern chemical theory and discussion of some of the more common industrial processes. Slide rules are required. Lectures and recitations: three hours a week; laboratory: two hours a week.

103, 104. *Introduction to General Chemistry* Eight Credit Hours
Required of all freshmen majoring in the arts courses.
A course designed for students majoring in the arts courses who do not expect to take any other course in chemistry. The fundamental principles of chemistry as drawn from the experiences of daily life; less comprehensive than Chemistry 101, 102. Lectures and recitations three hours a week; laboratory: two hours a week.

201. *Qualitative Analysis* Four Credit Hours
Required of all sophomores majoring in chemistry or premedicine; elective to others.

The separation and identification of the common cations and anions, with emphasis on the theory involved. Lectures: three hours a week; laboratory: three hours a week.

202. *Quantitative Analysis* Four Credit Hours
Required of all sophomores majoring in chemistry or premedicine; elective to others.
The theory and practice of quantitative analysis, with emphasis upon volumetric determinations. Lectures: two hours a week; laboratory: four hours a week. Prerequisites: Chemistry 101, 102, and 201, or permission by the department head for superior students in special situations.

301. *Advanced Quantitative Analysis* Four Credit Hours
Required of all juniors majoring in chemistry; elective to others.
A rigorous extension of volumetric and gravimetric analysis. Several of the determinations are largely instrumental procedures. Lectures: two hours a week; laboratory: four hours a week.
Prerequisite: Chemistry 202.

302. *Instrumental Methods* Four Credit Hours
Required of all juniors majoring in chemistry; elective to others.
The student is acquainted with the theory and practice of methods involving such instruments as colorimeters, electrophotometers, infrared, visible and ultra-violet spectrophotometers, polarographs, pH meters, titrimeters, electrodeposition apparatus, recorders, vapor phase chromatographs, gamma ray scintillation spectrometer, calorimeters, and other modern instruments including those used for detecting and measuring

radioactive materials. Lectures: two hours a week; laboratory: four hours a week.
Prerequisites: Chemistry 301, 305. Corequisite: Chemistry 306.

303, 304. *Organic Chemistry* Eight Credit Hours
Required of all juniors majoring in chemistry or premedicine.
The aliphatic and aromatic series and heterocyclic compounds; classroom discussions, lectures, and laboratory training in general reactions and synthetic methods. Lecture: three hours a week; laboratory: three hours a week.
Prerequisites: Chemistry 102 and 201; or permission by the department head for superior students in special situations.

305, 306 *Physical Chemistry* Eight Credit Hours
Required of all juniors majoring in chemistry; elective to others.
A study of the properties of solids, liquids, and gases, and of their relation to chemical constitution. Lecture: three hours a week; laboratory: three hours a week.
Prerequisites: Chemistry 202, Mathematics 122, and Physics 202. Corequisite: Mathematics 220.

308. *Chemical Literature* One Credit Hour
Required of all juniors majoring in chemistry; elective to others.
An introduction to the effective use of chemical literature. One lecture hour a week.

401, 402. *Inorganic Chemistry* Six Credit Hours
Required of all seniors majoring in chemistry; elective to others.
A study of the principles and reactions of inorganic chemistry; atomic theory, valence, chemical bonds, the periodic system, acid-base theories, complex ions, radioactivity and nuclear relationships. Lectures: Three hours a week.
Prerequisites: Chemistry 304 and 306.

403, 404. *Advanced Topics in Organic Chemistry* Six Credit Hours
Chemistry 403 is required of seniors in premedical, and both 403 and 404 are required of seniors in chemistry.
A course designed to familiarize students with the survey of complicated molecules and their reactions, thus contributing to their facility for undertaking the study of biochemistry and other complicated fields of organic chemistry. Lecture and recitations: three hours a week.
Prerequisites: Chemistry 303, 304.

405. *Advanced General Chemistry* Three Credit Hours
Elective to all except chemistry majors.
A comprehensive review of general chemistry with special emphasis on quantitative relations, equilibria, the periodic law, and the relation of chemical behavior to atomic structure. Lecture: three hours a week.
Prerequisites: Chemistry 201, 202, or permission of the department head.

406. *Physical Chemistry for Premedical Students* Three Credit Hours
Required of all seniors majoring in premedicine.
A course designed to permit students majoring in premedicine and lacking mathematical training to survey the general method of investigation of physical chemistry in quasi-mathematical forms. Lecture: three hours a week.

Prerequisites: Chemistry 201, 202; and Physics 203, 204.

407. *Organic Preparations* Three Credit Hours
Required of all seniors majoring in chemistry.
Advanced organic syntheses and technique with emphasis on purity and yield of products. Lecture: one hour a week; laboratory: four hours a week.

Prerequisites: Chemistry 303, 304.

408. *Qualitative Organic Analysis* Four Credit Hours
Required of all seniors majoring in chemistry; elective to others.
The classification, the study of type reactions, and the identification of pure organic compounds and mixtures of organic compounds. Lecture: two hours a week; laboratory: four hours a week.

Prerequisites: Chemistry 304 and 308.

411. *Physical Chemistry Topics* Three Credit Hours
Required of all seniors majoring in chemistry; elective to others.
Further exploration of problems and theory of physical chemistry in areas not fully treated in Physical Chemistry 305, 306.

Lectures: three hours a week. Prerequisites: Chemistry 304 and 306.

412. *Inorganic Preparations* Two Credit Hours
Required of all seniors majoring in chemistry.
Techniques employed in several widely different inorganic syntheses. Lecture: one hour a week; laboratory: two hours a week.

Prerequisites: Chemistry 301, 305.

Biology and Geology

No attempt is made at The Citadel to maintain separate departments in these two subjects. The courses are under the administration of the Department of Chemistry.

The courses in biology offered to students majoring in premedicine meet the requirements of the more exacting medical colleges. However, since biology and geology have made a great contribution to modern philosophy, a knowledge of at least their elemental aspects is a distinct contribution to the general culture of any student. Accordingly, Biology 201, 202 and Geology 301, 302 are made available for election to all upper classmen. Geology 303 is limited to students majoring in civil engineering.

201, 202. *Elementary Biology* Eight Credit Hours
Required of all sophomores majoring in premedicine, education and physical education; elective to others.
The various classes of organisms from the standpoint of anatomy, physiology, phylogeny, and ecology; occasional lectures given on some of the broader aspects of the subject such as heredity, cycle of the germ-cell, pathogenic organisms. Lecture: two hours a week; laboratory: four hours a week.

301, 302. *Comparative Vertebrate Anatomy* Eight Credit Hours
Required of all juniors majoring in premedicine.
Comparative anatomy of vertebrate forms. Lecture: two hours a week; laboratory: four hours a week.
Prerequisites: Biology 201, 202.

Biol 303, 304. *Human Anatomy and Physiology* Six Credit Hours
Required of juniors majoring in physical education and elective to juniors and seniors other than premedical majors.
The structure and function of the human body, together with a brief survey of its embryonic development. Lecture: three hours a week.
Prerequisites: Biology 201, 202.

401. *Embryology* Four Credit Hours
Required of all seniors majoring in premedicine.
Embryology of representative vertebrates, including the amphibian and bird, with additional material on mammals. Lecture: two hours a week; laboratory: four hours a week.
Prerequisites: Biology 301, 302.

402. *Descriptive Histology* Three Credit Hours
Elective to all seniors majoring in premedicine. Offered in the second semester on alternate years with Genetics, 404.
Histology of mammalian tissue with descriptive function of each practical work in the identification of vertebrate tissue and occasional lectures on microscopic technique. Lecture: two hours a week; laboratory: two hours a week.
Prerequisite: Anatomy 301.

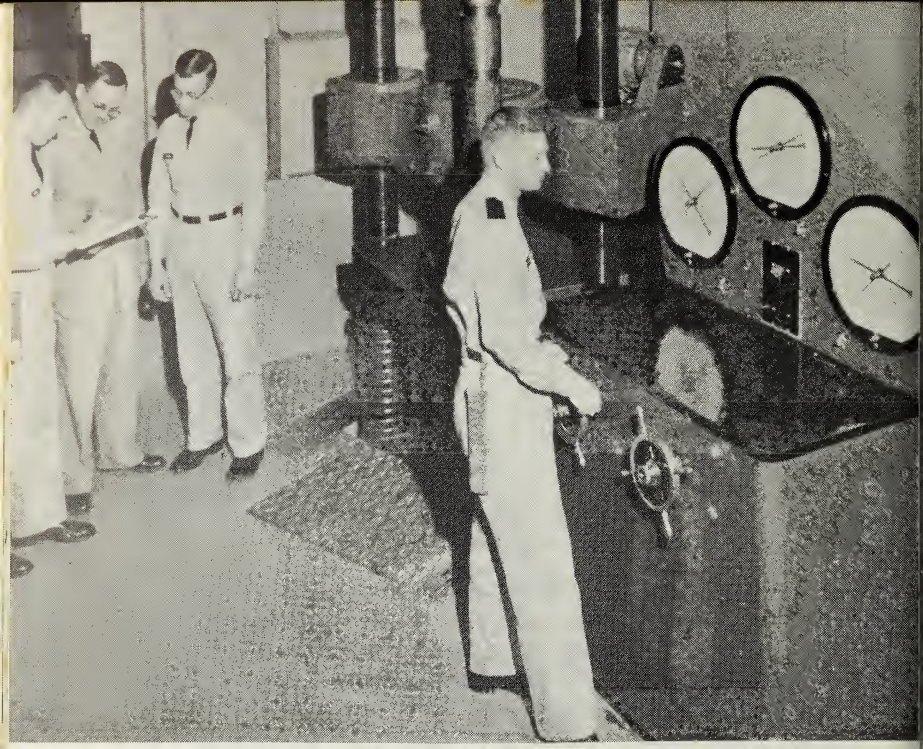
404. *Genetics* Three Credit Hours
Offered in the second semester of alternate years with Descriptive Histology, 402.
Genetics and heredity play an important role in all life sciences. The course presents in a relatively non-technical manner the basic facts essential for an understanding of the mode of inheritance in plants and animals with the major emphasis on animals. It is strongly suggested by many medical colleges. Election by education and by physical education majors is recommended.
Lecture: two hours a week; laboratory: two hours a week.
Prerequisite: Biology 201, 202.

301, 302. *Elementary Geology* Six Credit Hours
Elective to all juniors and seniors.
The various processes, such as crust movements, igneous influences, weathering, erosion, denudation, and transportation which have been instrumental in shaping the earth; the composition, structure, and arrangement of igneous and sedimentary rocks; and a survey of the historical aspects. Lecture: three hours a week.

303. *Engineering Geology* Four Credit Hours
Required of and limited to juniors majoring in Civil Engineering.
The origin and occurrence of the three major groups of rocks, their composition, resistance to weathering, and employment in engineering construction, the various processes of dynamic geology considered with special reference to their application to engineering practice. Lecture: three hours a week; laboratory: two hours a week.

All Candidates For Graduation

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation.
A research problem and accompanying report are required for all chemistry majors and urged for premedical majors. See page 81.



DEPARTMENT OF CIVIL ENGINEERING

Professors: Himelright, Myers, Causey
Associate Professors: Hutto, Mellard
Assistant Professors: Key, Middleton, Rutland, Robinson, Ingram

The objective of the Civil Engineering Department is to give a course that will meet the basic educational requirements of the profession of civil engineering. This objective is sought through a co-ordinated program of liberal, scientific, and technological courses designed to broaden and enrich the student's general education as well as to lay the foundation for technical competence.

Recent curriculum changes have been made in order to increase the number of liberal arts courses so that students may achieve a well-rounded general education.

The program in the freshman class does not differ essentially from liberal arts programs in most undergraduate courses. In the sophomore class, limited specialization begins with the introduction of courses in surveying, analytic statics, and graphic statics. In the junior and senior years the time is devoted essentially to basic professional courses. Throughout the four years the program is taught with the primary emphasis upon inculcating habits of orderly study, investigation, and sound

reasoning rather than upon the mere acquisition of factual information. Constant attention, too, is given to engineering procedure in its wider sense, that is, the characteristic methods by which engineers conceive, design, and construct engineering projects.

Such a curriculum, ably taught, should prepare the better students to develop a mastery of such special fields as their subsequent employment may lead to or to pursue more advanced work in the graduate schools of engineering. In general educational value, if properly adapted to the student's interests and aptitudes, it should meet the educational demands of good citizenship in whatever field the graduate enters.

The new concept of the engineer is that of a professional man thoroughly grounded in technology but also alive to the social and economic implications of his professional activities. It clearly appears to be the duty of engineering schools to fashion their graduates in this mold in so far as limitations of time will permit.

The civil engineering curriculum is accredited by the Engineers' Council for Professional Development.

There is a successful student chapter of the American Society of Civil Engineers.

For students having an especial interest in highway engineering there is a student chapter of The American Road Builders Association.

There is an active chapter of Sigma Epsilon Pi, a local honorary engineering society.

DEGREE: The degree of Bachelor of Science in Civil Engineering (B.S. in C.E.) is awarded to those who successfully complete the program of studies on page 85.

BUILDINGS: The department is housed in its own buildings on the north end of the campus. The main building was designed specifically for the needs of civil engineering instruction, and it contains the necessary laboratories, drafting rooms, classrooms, and other rooms needed to carry on the work of the department. An auxiliary building houses a portion of the soils laboratory. In addition this department has classrooms and a drafting room in the Physical Education Building.

JOHN ANDERSON MEMORIAL LIBRARY: The department maintains a small but well-selected and arranged library that is open to students at all hours. Current copies and files of leading engineering magazines are available in the reading room.

EQUIPMENT: Well-equipped laboratories are maintained for work in cement and concrete, bituminous materials, soils, fluid mechanics, sanitary engineering and structural materials. For the work in cement

and concrete a curing room with temperature and humidity controls and another room for steam curing are available.

In the concrete laboratory there is an adequate supply of equipment for every student to prepare his individual test specimens. The equipment includes a large supply of molds, platform scales, mixing tables, a two-cubic-foot concrete mixer, concrete block machine, air entrainment measuring apparatus, and the usual minor articles.

In the materials testing laboratory the main items of equipment are a 400,000 pound Baldwin-Southwark universal hydraulic testing machine with a clearance of ten feet for column testing and a 36-inch wide working table; a 60,000 pound Tinius-Olsen hydraulic universal testing machine; a 150,000 pound Olsen screw-power universal testing machine; a 10,000 inch pound torsion machine; a Rockwell hardness testing machine; a Sonntag fatigue machine; Brinell, cold bend, shearing, and transverse testing attachments, three spherically seated bearing blocks, and a variety of specimen grips for tensile testing; S R-4, Berry Whittemore, Riehle, and G. F. Moore strain gauges; compressometers, deflectometers, and other instruments for measuring deformation; a Beggs deformeter for use in model analysis; machined bearing blocks and I-beam with adjustable supports for transverse tests. This laboratory is equipped with an overhead crane for handling heavy specimens in any part of the room.

In the bituminous materials testing laboratory there is adequate equipment for making routine tests of asphalt cements, cut-back asphalts, and emulsified asphalts as well as tests of road tars. The equipment includes a Saybolt-Furol viscosimeter, an Engler viscosimeter, distillation apparatus, a penetrometer, a Cleveland open-cup flash point apparatus, ring and ball softening point apparatus, a Rotorex extraction machine and float test apparatus. In addition there is a Marshall Stability Testing machine and accessory equipment for design and analyzing asphalt paving mixtures by the Marshall method. Also there is complete equipment of 2" and 6" Hubbard-Field apparatus for molding specimens for design of bituminous mixtures. Supplemental equipment includes ample glassware, thermostatically controlled electric and gas ovens, constant temperature water bath, a cold water circulating apparatus and cleaning tank with special solvent for quick and easy cleaning of equipment.

The soils laboratories are equipped with both scale and dead-weight consolidometers, triaxial and direct shear machines, unconfined compression machines, permeameters, Atterberg limit equipment, Proctor and modified A.A.S.H.O. compaction apparatus, standard sieves and soil hydrometers, C.B.R. apparatus, and other equipment needed for tests and experiments with soils.

The fluid mechanics laboratory is equipped for a variety of experiments in the flow of water through pipes and orifices and over weirs.

Water is supplied by a 500-gpm centrifugal pump to a constant head tank, from which it is distributed to the various test units and returned through floor channels to the pump intake. Equipment includes Venturi meter, orifices, weir, parshall flume, pipe ranges, differential gauges, hook gauges, weighing tanks, and scales.

The sanitary engineering laboratory is equipped for experiments according to "Standard Methods," which represent the current practice for ordinary problems in water and sewage analysis. For water analysis, pH, alkalinity, acidity and bacteriological examinations may be made. For sewage analysis, tests for pH, biochemical oxygen demand, and solids content may be made. The equipment includes incubator, muffle furnace, balances, pH meters, and constant temperature refrigerator.

Adequate equipment is available for the courses in surveying. This includes fourteen transits, one micro-optical reading transit, nine levels, four plane tables, two sextants, aneroid barometer, several compasses, standardized tapes, and a complete supply of level rods, tapes, and pins. For photogrammetric work there is a rectoplanograph, sterocomparagraph, stereoscope radial plotter, extended eye base stereoscope, parallax bar, "Lazy Daisy" mechanical triangulation set, forty pocket stereoscopes, thirty-nine height finders and about five hundred aerial photographs of various sections of the United States including a complete stereoscopic coverage of Charleston County, South Carolina. This equipment is used in both the surveying and the photogrammetry courses.

All drafting rooms, laboratories, classrooms, and the library are equipped with fluorescent lighting. Two of the larger classrooms and one drafting room may be darkened at any time to show motion pictures, for which a sound or slide projector is available. The drawing rooms are furnished with tables, and there are available drafting machines, parallel rules, planimeters and necessary minor items. A printing room is equipped with an Ozalid dry printing machine.

A computation room in the center of the building, open to students at all times, is equipped with Monroe calculating machines. This facility has done much to expedite numerical calculations and thus saves much of the students' time.

An assembly room equipped with black-out shades, a large projection screen, and raised speaker's platform, and having a seating capacity of one-hundred-forty persons, provides a meeting room for student societies, instruction with visual aids, and other meetings.

The electives in the sophomore and junior years must be in the field of humanities and must have the approval of the Department of Civil Engineering. Also the requirements of the department offering the elective must be met.

101, 102. *Graphic Science* Four Credit Hours
Required of all Civil and Electrical Engineering Freshmen.

Use and care of drawing instruments; proper weights and types of lines for clear, clean-cut, and complete graphical representation; useful geometrical construction; freehand sketching; orthographic projection; auxiliary, revolved, and sectional views; pictorial representation with emphasis on isometric drawing; dimensioning; true lengths and shapes; intersections and developments; problems on points, lines, and planes to be solved by the method of auxiliary planes in third angle projection; also specifications of fastenings, and typical engineering drawing of a steel truss. Problems selected with a view to emphasizing practical applications and developing the ability of the student to think in three dimensions. Development of reasonable skill in lettering. Laboratory: four hours.

202. *Statics* Four Credit Hours

Required of all Civil Engineering Sophomores.

Analytic and graphic solutions of problems in statics; principles of statics; resultants, reactions, and equilibrium of forces; analysis of simple trusses; friction; centroids and centers of gravity; moments of inertia. Laboratory period used for graphical solutions. Lecture: three hours; laboratory: two hours.

Prerequisites: Phy. 201; Graphic Science 102; eligible for Math. 122.

204. *Photogrammetry* One Credit Hour

Required of all Civil Engineering Sophomores.

An elementary course in aerial photography and topographic mapping; methods of topographic projection; planning topographic flights; basic photo-interpretation; geometric properties of photographs; radial line plotting; photographic measurements. Laboratory: two hours.

Prerequisites: C.E. 205; Concurrent with Surveying 206.

205, 206. *Surveying* Eight Credit Hours

Required of all Civil Engineering Sophomores.

Linear measurements; leveling; compass and transit; slide rule and calculating machines; theory of errors; land surveying and boundary laws; latitudes and departures; areas and volumes; stadia; plane table; route surveys; vertical, circular, and transition curves; State plane coordinates; standard map projections; Polaris and solar observations; introduction to the use of electronic computers. During the 206 semester there is a one-day, eight-hour field trip on a designated Saturday for the purpose of making a complete topographic survey from which a topographic map is drawn. Also required is one night-time Polaris observation during the 206 semester. Required student equipment: "log-log" duplex slide rule.

Lecture: three hours. Field two hours in addition to the field trip and Polaris observation.

Prerequisites: Graphic Science 201; Math. 121; Concurrent with or following Math. 122.

301. *Dynamics* Three Credit Hours
Required of all Civil Engineering Juniors.
Types and principles of motion in relation to rigid bodies; rectilinear translation; curvilinear translation; rotation; work and energy; impulse and momentum. Lecture: three hours.
Prerequisites: C.E. 202; Math. 122.

303. *Mechanics of Materials* Four Credit Hours
Required of all Civil Engineering Juniors.
Elastic properties of structural materials; internal stresses and strains in beams, columns, shafts; riveted and welded joints; shear and noment diagrams; combined bending and direct stress. Supplemented by materials Laboratory, C.E. 307, which is to be taken either before or concurrently with C.E. 303. Lecture: four hours.
Prerequisites: Math. 122; C.E. 202.

304. *Mechanics of Materials* Three Credit Hours
Required of all Civil Engineering Juniors.
Deflection of beams; unsymmetrical bending; principal stresses; fundamental theory and principles of pre-stressed concrete. Lecture: three hours.
Prerequisites: Math. 220; C.E. 303.

305. *Highway Engineering* Three Credit Hours
Required of all Civil Engineering Juniors.
Highway economics; road costs and road user costs; economic comparison of alternates by benefit-cost ratio method; planning and financing; legislation and administration; location and geometric design; basic principles of traffic surveys; method of predicting future traffic volumes; basic highway soils engineering; drainage; grading. Lecture: three hours.
Prerequisite: C.E. 206.

306. *Highway Engineering* Three Credit Hours
Required of all Civil Engineering Juniors.
Alignment and earthwork drawings and computations; routine tests of highway materials, bituminous and non-bituminous; pavement and base thickness design; design and testing of asphalt paving mixtures; construction of roadway elements; construction surveys; contracts and specifications: Lecture: two hours; laboratory: two hours.
Prerequisite: C.E. 305.

307. *Materials Laboratory* One Credit Hour
Required of all Civil Engineering Juniors.
Laboratory supplement to Mechanics of Materials C.E. 303. Introduction to the use of testing machines and equipment; strength and deformation measurements of ferrous metals and concrete; properties of materials as determined by test results; compression; tensile and bending specimen tests; use of SR-4 electric strain gauge; the deter-

mination of stresses and strains in models of structural frames; use of ASTM Specifications and Test Procedure. Laboratory: three hours.
Prerequisites: C.E. 202; Math. 122, concurrent with C.E. 303.

308. *Structural Analysis I* Three Credit Hours
Required of all Civil Engineering Juniors.
Analytic analysis of simple structures: force systems in space; shear and moment for static and moving loads on beams and trusses; forces in various types of statically determinate framed structures; influence line diagrams; plastic theory and analysis of elementary structures.
Prerequisites: C.E. 301, C.E. 303; Math. 220.

310. *Engineering Law and Specifications* Three Credit Hours
Required of all Civil Engineering Juniors.
An elementary course in law in relation to engineering practice, beginning with a brief study of the Constitution of the United States; contracts, agency, real and personal property, sales, mechanic's liens, workman's compensation laws; construction contract documents; advertising and awarding contracts; writing and interpretation of standard specifications. Lecture: three hours.
Prerequisite: Completion of all Freshman Work, English 202, and Surveying 206.

401. *Concrete Laboratory* Two Credit Hours
Required of all Civil Engineering Seniors.
Design, preparation and testing of portland cement concrete mixes for a desired quality of concrete using both plain portland cement concrete and concretes containing the various commonly used admixtures; test specimens cured under controlled temperatures and moisture conditions; close attention given to the influence of the quality and grading of the aggregates and to other features affecting the properties of the concrete ultimately forming a structure; study and discussion of specifications governing good construction practice in handling and placing aggregates and concrete, and the control and inspection of same.
Lecture: one hour; laboratory: two hours.
Prerequisite: C.E. 307.

402. *Soil Mechanics Laboratory* Two Credit Hours
Required of all Civil Engineering Seniors.
Classification, control, and soil strength tests to predict suitability of soil for use in earth dams, roads, and foundations; to include specific gravity, combined mechanical analysis, Atterberg limits, permeability, compaction, unconfined compression, consolidation, triaxial, direct shear, and C.B.R. tests; field tests to consist of field density tests, soil borings, and load tests. Lecture: one hour; laboratory: two hours.
Prerequisites: C.E. 401; C.E. 410 to be taken concurrently.

403, 404. *Reinforced Concrete Design* Six Credit Hours
Required of all Civil Engineering Seniors.

Theory and design of reinforced concrete structures, including the ultimate theory as applied to beams and columns. Design of footings; retaining walls; combined stress members; theory and design of prestressed concrete structures; design of selected portions of concrete structures with special attention to current specifications for design and construction. Lecture: three hours.
Prerequisites: C.E. 304, C.E. 308.

405. *Structural Analysis II* Four Credit Hours
Required of all Civil Engineering Seniors.
Theory of statically indeterminate structures, using method of work, three moment theorem, slope deflection, moment distribution; analysis of multistoried steel frame building; model analysis using Beggs Deformeter. Lecture: three hours; laboratory: two hours.
Prerequisites: C.E. 304, C.E. 308.

406. *Steel Design* Four Credit Hours
Required of all Civil Engineering Seniors.
Two different philosophies of analysis and design: First, by the elastic theory, the design of tension and compression members, beams, plate girders; analysis and design of highway bridge trusses; analysis, design, and structural drawing of a steel mill building. Second, by the plastic theory, the analysis and design of continuous beams and single-story rigid frames. Lecture: three hours; laboratory: two hours.
Prerequisite: C.E. 405.

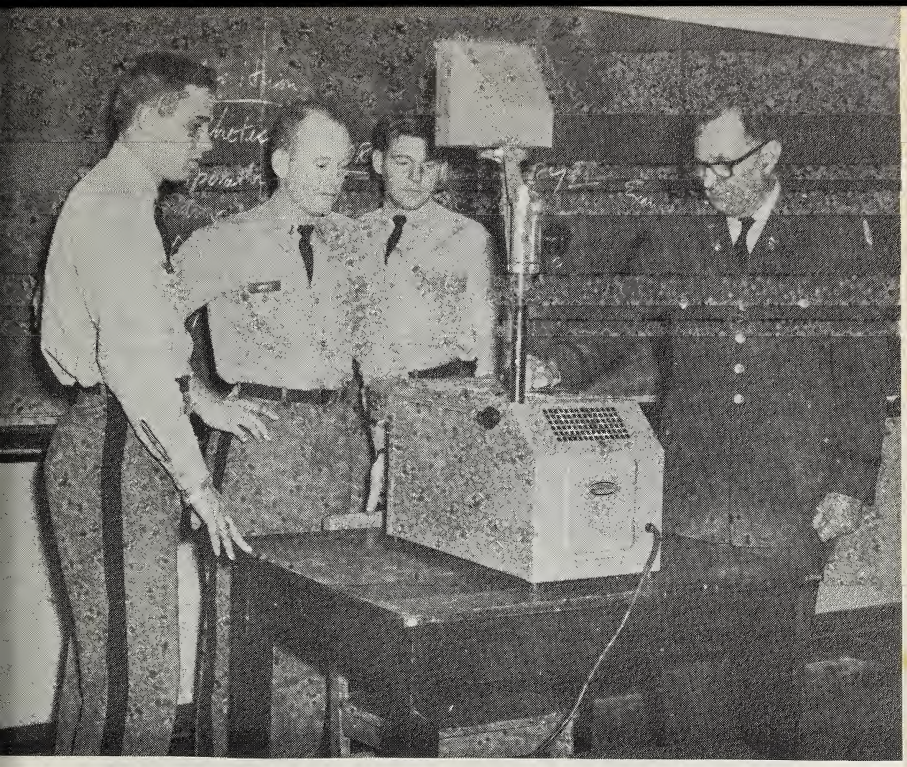
407. *Fluid Mechanics* Four Credit Hours
Required of all Civil Engineering Seniors.
Fluid characteristics, properties and definitions; fluid statics; fluid dynamics; fluid flow and measurements, and application in meters, orifices, weirs, pipes, and open channels; laboratory period for experimental demonstration of theory and for supervised computation work.
Lecture: three hours; laboratory: two hours.
Prerequisite: C.E. 301.

408. *Sanitary Engineering* Three Credit Hours
Required of Civil Engineering Seniors
Relationship of water supply and sewage disposal to public health; hydrology; water consumption; quality standards; collection, treatment and distribution of water; sewers and sewerage; quantity and characteristics of sewage; methods of treatment and disposal of sewage; laboratory period for experimental demonstration of theory and for supervised computation work. Lecture: two hours; laboratory: two hours.
Prerequisites: Completion of all work of the junior year and C.E. 407.

409, 410. *Soil Mechanics and Foundations* Six Credit Hours
Required of all Civil Engineering Seniors.
Soil physics; nomenclature and field identification; grain shape and

soil structure; classification systems; soil capillarity; Atterberg limits; permeability; seepage; flow nets; piping; subsurface drainage; frost action; permafrost; stresses in soils; consolidation; shear strength; stability of slopes; earth dams; bearing capacity; shallow foundations; pile foundations; earth pressure; retaining walls and open cuts; underpinning; caissons and cofferdams; subsurface exploration; soil stabilization. Lecture: three hours.
Prerequisites: Geol. 303, C.E. 304, C.E. 301, C.E. 306, C.E. 402 to be taken concurrently with C.E. 410. C.E. 407 to be taken concurrently with or preceding C.E. 409.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 81.



DEPARTMENT OF EDUCATION

Professor: Blanding
Associate Professor: Wimpey
Assistant Professors: Lenhardt, Bowman, Horne
Instructor: Weston

1. TEACHER-TRAINING

The Department of Education provides professional training for students who plan to teach in secondary schools. The curriculum meets the requirements for South Carolina teacher certification and the requirements of most other states.

The department also offers elective courses, which are available to majors in other departments, in the related fields of psychology, sociology, philosophy, and fine arts.

THE EDUCATION MAJOR

The following courses are offered by this department:

301. *Philosophy of Education* Three Credit Hours
An orientation course; a survey of the history, philosophies, and theories underlying organized education; the significance of the dissemination of knowledge in a democracy.

303. *Guidance* Three Credit Hours
Philosophy, principles, and techniques to provide teachers with competencies needed for participation in guidance programs; theories and practices of guidance; mental, vocational, and aptitude testing.

400. *Directed Teaching* Six Credit Hours
A requirement for certification; observation and teaching in approved high schools under approved supervisory teachers; supervision by college instructor.

The student must reserve for this teaching internship the same three consecutive hours daily, Monday through Friday, and must be enrolled concurrently in Education 403—Seminar in Secondary Education. He provides his own transportation. He must make formal application for Directed Teaching not later than two weeks prior to the beginning of the semester.

Limited to seniors majoring in Education.

401. *Methods and Materials of Secondary School Teaching* Three Credit Hours
Study of the aims, methods and materials employed in secondary school teaching; organization of subject-matter; motivation and direction of learning; development of attitudes, appreciations and ideals; classroom presentation of formal materials; conducting informal activities; provision for individual differences; measuring educational outcomes; reports; discussion.

402. *Principles and Problems of Secondary Education* Three Credit Hours
Definition and analysis of issues in American secondary education; the principles most applicable to the solution of these problems; the aims, curriculum, scope, and organization of the secondary school. Secondary education in a changing America; the impact of world conditions upon the secondary school; American secondary schools and the future.

403. *Seminar in Secondary Education* Three Credit Hours
Definition and discussion of principles, methods, and problems arising from experience in directed teaching; consideration of practical problems of secondary school teaching and administration; discovery of specific professional interests; observation of teaching; reading and observation reports.

Must be taken concurrently with Education 400, Directed Teaching.

406. *Educational Tests and Measurements* Three Credit Hours
Theories, principles, and practices of mental and educational measurements. The construction and use of the various types of objective instruments of evaluation. Elements of statistics needed in the interpre tation and use of examination results.

407. *Audio-Visual Aids* Three Credit Hours
The aims and scope of audio-visual instruction; techniques underlying their use; projects and practice in the uses of objects, specimens, models, and pictures; the opaque projector, the motion picture, film strips, and slides; radio, television, the public address system, and the various types of recorders; selection and care of equipment; administration and supervision of the audio-visual program.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 81.

II. RELATED FIELDS

In addition to the electives listed below, any of the Education courses except Education 400, Directed Teaching and Education 403, Seminar in Secondary Education, may be elected by qualified students in other departments.

Psychology

301. *General Psychology* Three Credit Hours
Elective for juniors and seniors. Required of premedical students.
An introduction to the scientific study of behavior; emphasis upon experimental investigation of such fields as attention, perception, learning, intelligence, emotion, and personality.

302. *Educational Psychology* Three Credit Hours
This course seeks to bring the principles of educational psychology to prospective teachers in order that they may teach effectively. A vast body of educational research and practice is brought to bear on the following areas: psychology and school problems; learning readiness and its development; learning skills, ideas, and attitudes; planning, motivation, and evaluation of learning; and emotional and mental health for learning.

304. *Abnormal Psychology* Three Credit Hours
Required of premedical students.
Findings based upon experimental investigation of such fields as attention, perception, and association; theories of personality; discussion of the common neuroses and psychoses.
Prerequisite: Psychology 301.

305. *Social Psychology* Three Credit Hours
A study of the individual in relation to his social environment with special attention to group behavior, social motivation, and individual adjustment to group situations. May be considered a social science course.

306. *Theories of Personality* Three Credit Hours
A study of major contemporary theories of personality with special emphasis on the biological and psychological foundations and integrative aspects of personality.

307. *Mental Hygiene* Three Credit Hours
Science of preserving psychological health. The causes and prevention of mental abnormalities.

401. *Psychology of Adolescence* Three Credit Hours
Required of Education majors.
The physical, psychological and social development of the adolescent; emphasis on personality formation and problems of social adjustment.

404. *Applied Psychology* Three Credit Hours
Application of the principles of psychology to such topics as education, mental health, industry, crime, advertising, and personal problems. Emphasis will be upon a practical system of psychology and the well-integrated personality.

Philosophy

306. *Logic* Three Credit Hours
The principles of valid thinking; laws of reasoning; common fallacies; deductive and inductive methods.

307. *Ancient Philosophy* Three Credit Hours
A brief survey of Greek philosophy; primarily a study of Plato's *Republic* and Aristotle's *Politics.*

308. *Medieval and Early Modern Philosophy* Three Credit Hours
A study of the ideas most important to the contemporary world which developed in the period from the fourth to the eighteenth century. These will include the philosophies associated with the medieval church, the Renaissance and Reformation, the rise of scientific thought and rationalism, and the eighteenth century enlightenment.

309. *Modern Philosophy* Three Credit Hours
A study of some of the most important and representative ideas of the nineteenth and twentieth centuries. These will include conservatism, liberalism, Darwinism, and nationalism.

Sociology

301. *Introduction to Sociology* Three Credit Hours
The scientific study of principles and comparisons in society and culture as these relate to population and communities, behavior systems, group collectivity and structure, social change, and institutions.

302. *Social Problems* Three Credit Hours
A study of the breakdown of society in its various forms with consideration of the causation as well as the resultant problems; special emphasis given to contemporary problems such as the broken family, juvenile delinquency, unemployment, and individual personality maladjustment.

303. *The Contemporary American Family* Three Credit Hours

A frank and comprehensive analysis of the problems confronting the modern American family, with case studies treating the various phases of conflict within the family.

401. *Criminology* Three Credit Hours

A study of crime, its causes, conditions prevention, and treatment; a presentation of theories and hypotheses, supported by concrete facts, designed to assure the student that the theories proposed are based upon realities and exact observation.

Recommended only for students who have completed Sociology 301, Introduction to Sociology.

Soc. 402. *Social Anthropology* Three Credit Hours

The nature of social organization and the processes of social interaction characterizing different societies; stress on culture in relation to the society which is the creator and bearer of that culture.

Fine Arts

305. *Music Appreciation* Three Credit Hours

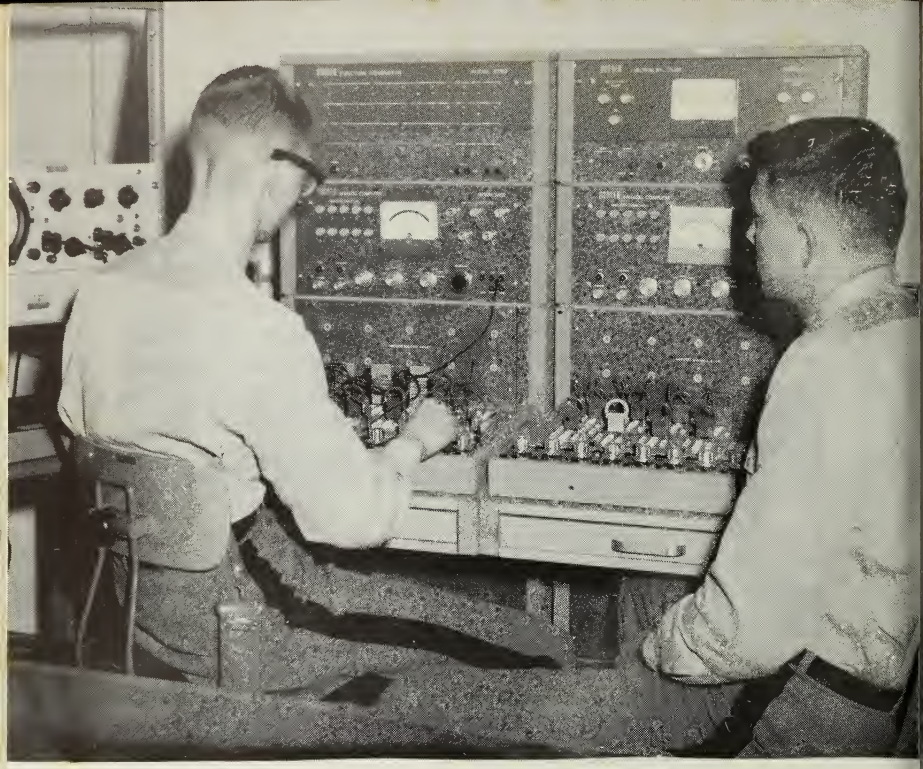
A non-technical course to enhance the student's understanding and enjoyment of music by a two-fold approach: first, to gain fundamental knowledge of style, content, and form of the more outstanding works of the great composers; and, second, to study the evolution of musical art up to the present time; particular emphasis placed upon the latter.

306. *Art Appreciation* Three Credit Hours

The theory of astract principles and material techniques as applied in the evaluation of works of art. The employment of such theory in an introductory study of famous art works.

307. *Art History* Three Credit Hours

Survey of the history of art, with emphasis upon Western civilization. A chronological sequence of the major creators of art, from prehistoric to modern times, identifying, evaluating, and comparing their works in terms of styles, schools and periods against their respective backgrounds—political, economic, geographic, educational and social.



DEPARTMENT OF ELECTRICAL ENGINEERING

Professor: Herring
Associate Professor: Cory
Assistant Professors: Johnson, Faulk

In 1941 the Board of Visitors authorized the establishment of a Department of Electrical Engineering at The Citadel. The department was founded to meet the needs of many students who are attracted to the type of education which The Citadel offers, but who were formerly compelled to go elsewhere to obtain training in the field of their special interest.

The first graduating class of eight men received degrees in September 1948. Since then, the facilities and curriculum have been steadily improved. A chapter of Student Members of the Institute of Electrical and Electronics Engineers is active at The Citadel.

It is the purpose of the department to prepare men for professional work or for graduate study in the field of electrical engineering and to give them training in as many of the elements of a broad education as can be included in a program of professional study leading to the degree of Bachelor of Science in Electrical Engineering.

The classrooms and laboratories of the department are located in the east wing of Bond Hall. The electronics laboratory is equipped with custom-built breadboards for the efficient study of vacuum-tube and transistor circuits. Modern instruments are available for performing tests and making measurements. The recent addition of an X-Y plotter has provided accurate characteristic and response curves in far less time than formerly required. The apparatus used in the electrical measurements laboratory is modern precision equipment made for laboratory and industrial use. An instrument storeroom and shop adjoins the electrical measurements laboratory and the electronics laboratory.

Three analog computers and a breadboard servomechanism set are available in the computer and control system laboratory. A twenty-amplifier analog computer along with such peripheral equipment as a low-frequency function generator, a two-channel recorder, an X-Y plotter and an oscilloscope camera is used extensively in the study of various types of physical systems.

The machines laboratory is equipped with machine benches having individual electric power panels to which connections are made by polarized plugs. The machines are of moderate size to allow the student to have intimate contact with them in their operation. The student can, therefore, make his own connections and operate and control the machines without assistance. A Westinghouse generalized machine is also available for study of the relations existing between various types of rotating machines. The shop has adequate facilities for instrument repair and maintenance, and for construction of special apparatus.

For a tabulation of the requirements for the Electrical Engineering major, see "Courses of Study," page 87.

Curriculum

The freshman courses in electrical engineering and in civil engineering are identical. Courses in the electrical engineering curriculum which are offered by other departments are described by those departments.

201, 202. *Introduction to Electrical Engineering* Six Credit Hours
Required of Electrical Engineering Sophomores.
D. C. circuit theory; simple networks and their solutions; introduction to electric and magnetic fields; circuit components and their ratings; electrical standards and definitions; basic A. C. theory; fundamental electrical measuring instruments; selected topics supplementing the electrical content of Physics 202. A "Take-Home Laboratory Kit" is provided the student with which he verifies such basic laws as Ohm's and Kirchoff's. Lecture: three hours, two semesters.

Prerequisites: To be preceded or accompanied by Physics 201-202; Math. 122.

203. *Computer Programming* One Credit Hour
Required of Electrical Engineering Sophomores; open to others.
The application of mathematical methods and digital computers to basic problems in engineering and science; practice in program writing using algebraic compilers. Lecture: one hour.

305. *Introduction to Electronics* Three Credit Hours
Required of Electrical Engineering Juniors.
Electron ballistics and basic semiconductor physics; characteristics of high vacuum and gas-filled tubes, semiconductor devices; analysis of active networks. Lecture: three hours.
Prerequisites: Math. 220; Physics 202; E.E. 202.

306. *Introduction to Electronics* Three Credit Hours
Prerequisites: E. E. 305; Math. 220.
Required of Electrical Engineering Juniors.
Theory and design of rectifiers and amplifiers employing electron tubes and semiconductor devices. Lecture: three hours.

308. *Elements of Electrical Engineering* Four Credit Hours
Required of Civil Engineering Juniors.
Direct-current circuits, magnetic circuits, alternating-current circuits, transformers, industrial wiring, rotating machinery, saturable reactors and magnetic amplifiers; basic electronics including semiconductors, methods of electrical measurements and control.
Lecture: Three hours; Laboratory or demonstration: two hours.
Prerequisites: Math. 220; Physics 202.

309. *Electrical Engineering Circuits* Six Credit Hours
Required of Electrical Engineering Juniors.
Analytical and phasor treatment of harmonically varying electromotive forces, currents, and power in any combination of resistance, inductance, and capacitance; calculation of balanced and unbalanced polyphase circuits; Fourier series and integrals, two port networks; filters. Network theorems and matrix methods. Introduction to the Laplace transform; transient response and the complex frequency plane.
Lecture: five hours; laboratory: two hours.
Prerequisites: E.E. 202; Physics 202; Math. 220.

310. *Electrical Machinery* Six Credit Hours
Required of Electrical Engineering Juniors.
Flux, torque, current, electromotive force, and regulation in self-regulating machines; commutation and armature reaction; power losses and efficiency; control of motors and generators; transformers.
Lecture: five hours; laboratory: two hours.
Prerequisites: E. E. 309; Math. 220.

401. *Electronic Circuits* Four Credit Hours
Required of Electrical Engineering Seniors
Theory and design of electronic circuits; narrow-band, wideband, and

D.C. amplifiers; oscillators, modulators, and detectors; pulse circuits.
Lecture: three hours; laboratory: two hours.
Prerequisites: E.E. 309, 306; Math. 322.

402. *Electronic Systems* Four Credit Hours
Required of Electrical Engineering Seniors.
A.M., F.M., and pulse communication systems; instrumentation.
Lecture: three hours; laboratory: two hours.
Prerequisites: E.E. 401, 403, 405, 407, 413.

405. *Electrical Measurements* Four Credi Hours
Required of Electrical Engineering Seniors.
Modern methods of measuring current, electromotive force, inductance, capacitance, and magnetic quantities; calibration of electrical instruments; location of circuit faults.
Lecture: three hours; laboratory: two hours.
Prerequisites: E.E. 309, 310; Math. 322.

413, 414. *Circuit Networks* Six Credit Hours
Required of Electrical Engineering Seniors.
Networks: transformations, transient systems, filter networks; the use of symmetrical components for analysis of unbalanced polyphase systems; solutions using the La-place transform; hyperbolic functions; tensor and matrix methods; short-circuit and line fault computations.
Lecture: three hours, two semesters.
Prerequisites: E.E. 309, 310; Math. 322.

415, 416. *Automatic Control Systems* Six Credit Hours
Required of Electrical Engineering Seniors.
Electrical, mechanical and hydraulic control system components; feedback theory; analysis and design of automatic control systems.
Lecture: three hours, two semesters.
Prerequisites: E.E. 309, 310; Math. 322.

417, 418. *Electromagnetic Theory* Six Credit Hours
Required of Electrical Engineering Seniors.
Vector algebra; electrostatic and magnetostatic fields; Maxwell's equations; boundary conditions; wave propagation and radiation.
Lecture: three hours, two semesters.
Prerequisites: Math. 322.

422. *Electronic Computers* Three Credit Hours
Required of Electrical Engineering Seniors.
A study of digital and analog computers. Boolean algebra; synthesis of switching circuits; basic logic circuits; digital computer structure; operational amplifiers; function generators; multipliers: practice in programming analog and digital computers. Lecture: three hours.
Prerequisites: Math. 322.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 81.

DEPARTMENT OF ENGLISH

Professors: Achurch, Harrison, Doyle
Associate Professors: McDowell, Carpenter, Davis, Weile
Assistant Professors: Whitney, Morris, Mulkey, Peurifoy, Harvey, MacLeod, Alexander, Holbein, Mathis, Brennan, Bargainnier, Stutler.
Instructor: Neville

Courses in English composition and literature are required of all freshmen and sophomores, regardless of their major fields of study.

The course of study for the English major is designed to give the student a thorough grounding in the English language and in the literature of England and America and at the same time to give additional breadth to the student's development through prescribed courses in the physical sciences, mathematics, history, a modern foreign language, and selected courses from other departments related to the career or to the field of graduate study the student expects to follow after his graduation.

Since the student majoring in English has the opportunity during his junior and senior years of selecting at least four, and in some instances five, full-year courses in other specialized fields of study, many students select the English major as a liberal arts background for careers in business, journalism, and creative writing, or for graduate study of business, law, dentistry, theology, and similar fields.

The required courses in the department for the English major are English 203, 204 (The English Language), English 301 (Chaucer), English 400 (Milton), English 401, 402 (Shakespeare), English 403, 404 (American Literature), and English 420 (Senior Essay, a research paper). In addition, the student must elect six semester courses from the department other than English 205, 206, 409, and 410.

The foreign language requirement for the English major is French or German 101, 102, 201, 202. Entering freshmen with two or more units in either of these languages complete their modern language requirement in one year and hence acquire another elective course.

For a tabulation of the requirements for the English major, see "Courses of Study," page 88.

101, 102. *Composition and Literature* Six Credit Hours
Required of freshmen who, on the basis of nationally approved tests, show some real understanding of the fundamentals of English writing. The course stresses the development of the basic skills of writing and reading and of literary evaluations through the study of five types of literature. English 101 is a prerequisite for English 102. Lecture: three hours.

103, 104. *Composition and Literature* Six Credit Hours
Required of freshmen who, on the basis of tests, show a lack of fundamental skills in writing. The same course as English 101, 102, but with an additional class hour each week for teaching fundamentals. English 103 is a prerequisite for English 104. Lecture: four hours.

105, 106. *English for Spanish-speaking Students* Six Credit Hours
A course in English as a foreign language, taught in the Department of Modern Languages with the cooperation of the Department of English, and made mandatory for the fulfillment of the general Modern Language requirement for those Spanish-speaking students matriculating at The Citadel with too little English to succeed. Lecture three hours.

201, 202. *A Survey of English Literature* Six Credit Hours
Required of all sophomores. A survey of English literature from the Old English period to the present. Frequent themes on the literature studied. English 201 is a prerequisite for English 202. Lecture: three hours. Prerequisite: English 101, 102 or 103, 104.

203, 204. *The English Language* Six Credit Hours
Required of sophomores majoring in English. Open as an elective to others.
A survey of the history of the English language, beginning with the Indo-European backgrounds, tracing the development of Old, Middle, and Modern English through major phonological, morphological, and syntactical changes, with some attention to dialectal variations, and concluding with emphasis on standard and current grammar and usage.

205. *Introduction to Public Speaking* Three Credit Hours
Open to sophomores, juniors, and seniors.
The general principles of speech composition and speech presentation; practice in expository speaking. Lecture: three hours.

206. *Persuasive Speaking* Three Credit Hours
Open to sophomores, juniors, and seniors.
Logic, rhetoric, and psychology of securing desired reactions from friendly, neutral, and hostile audiences; sources of speech material and planning the speech; improvement of volume, diction, rate, and platform manners in extemporaneous and manuscript delivery of classroom speeches. Lecture: three hours.
Prerequisite: Public Speaking 205.

210. *General Semantics* Three Credit Hours
Open to sophomores, juniors, and seniors.
A psychological approach to the study of language as an abstracting process employing a system of verbal symbols for informative, directive, and affective purposes. Lecture: three hours.

Except for Chaucer (301), *Milton* (400), *Shakespeare* (401, 402) *and American Literature* (403, 404), *which are offered every year, the followed courses are usually offered in alternate years. Starred courses are offered in* 1965-66.

*301. *Chaucer* Three Credit Hours
Required of all English majors. Open as an elective to other juniors and seniors.
An introduction to Chaucer's language, narrative skill, and mastery of poetic forms through reading in the original "The General Prologue" and selected tales from *The Canterbury Tales* and some of the shorter poems. Lecture: three hours.

*302. *Seventeenth Century Poetry and Prose Exclusive of Milton* Three Credit Hours
Open to juniors and seniors.
A study of representative prose prior to the Restoration, of representative poetry of Ben Jonson and his "sons," and of John Donne and the metaphysical poets. Lecture: three hours.

*303. *Neoclassicism,* 1660,1744 Three Credit Hours
Open to juniors and seniors.
Dryden, Addison, Swift, and Pope, with some attention to the lesser writers of the period. Lecture: three hours.

*304. *The Romantic Movement* Three Credit Hours
Open to juniors and seniors.
A study of the chief features which culminated in the Romantic writings of the early nineteenth century, with special emphasis on the

five major poets: Wordsworth, Coleridge, Byron, Shelley, Keats. Lecture: three hours.

305. *Victorian Poetry and Prose* Three Credit Hours
Open to juniors and seniors.
A study of the period from 1830 to 1900, showing the effects of the Industrial and Scientific Revolutions on traditional attitudes toward art and life through the works of the major writers of the period, with emphasis upon the poetry of Tennyson, Browning, and Swinburne and upon the prose of Carlyle, Arnold, Huxley, and Pater. Lecture: three hours.

*306. *Modern British and American Poetry* Three Credit Hours
Open to juniors and seniors.
Study of the poetry of Keats, Robinson, Frost, Eliot, and Auden from as extensive a reading of their work as time permits; lectures planned to provide a foundation for future reading in these five and other poets; term essay and class report on a twentieth-century poet other than the above five, each member of the class studying a different poet. Lecture: three hours.

*307. *A Survey of English Drama to* 1890 Three Credit Hours
Open to juniors and seniors.
A tracing of the course of English drama from its origin in medieval times to the beginnings of modern drama in the middle of the nineteenth century; detailed study of representative plays. Lecture: three hours.

*308. *Modern British and American Drama* Three Credit Hours
Open to juniors and seniors.
A detailed study of a few representative plays to show the major trends in British and American drama since the time of Ibsen. Lecture: three hours.

*309. *The Development of the English Novel to* 1900 Three Credit Hours
Open to juniors and seniors.
Lectures on narrative forms which preceded the novel and on lives and works of major eighteenth and nineteenth century novelists; reading and discussion of eight of their novels. Lecture: three hours.

310. *Modern Novel in English* Three Credit Hours
A course in the reading and critical analysis of selected English and American novels by James, Conrad, Schreiner, Lawrence, Anderson, Lewis, Cather, Hemingway, and Faulkner. A term paper on a novel other than those studied in class. Lecture: three hours.

311. *Advanced Composition* Three Credit Hours
Open to selected juniors and seniors.
The development of effective styles of writing through analysis and imitation of masters of English prose.

Prerequisite: English 202 and departmental approval. Lecture: three hours.

312. *Contemporary British Literature* Three Credit Hours
A study of selected works by major British novelists and poets whose writings are representative of the ideas, literary techniques, and cultural patterns of England and Ireland from World War I to the present. Poets studied: Hardy, Hopkins, Housman, Graves, Spender, Thomas; novelists: Maugham, Joyce, Forster, Huxley, Lawrence, Waugh. Lecture: three hours.

*400. *Milton* Three Credit Hours
Required of all English majors. Open as an elective to other juniors and seniors.
A study of *Paradise Lost* entire, of *Samson Agonistes,* and of representative prose works, with special attention to the philosophical content. Lecture: three hours.

*401,402. *Shakespeare* Six Credit Hours
Required of all English majors. Open as an elective to other juniors and seniors.
An intensive study of representative plays—comedies, histories, tragedies, and dramatic romances—to give the student insight into the greatness of Shakespeare as dramatist, poet, and illuminator of life. Lecture: three hours.

*403, 404. *American Literature* Six Credit Hours
Required of all English majors. Open as an elective to other juniors and seniors.
A study of some of the best writing done in America from the time of the first settlements to the time of Henry James: the first semester covering writers of the colonial and revolutionary periods and Irving, Cooper, Bryant, Hawthorne, and Poe; the second semester beginning with transcendentalism and concluding with Howells. Lecture: three hours.

*405. *Backgrounds of English Literature* Three Credit Hours
Open to juniors and seniors.
An examination of the great literary traditions—epic, lyric, romantic, dramatic, narrative, philosophical—in the literature of both the Orient and the Occident from the beginnings to the Fifteenth Century with emphasis on their contributions to English literature. Lecture: three hours.

*406. *Backgrounds of English Literature* Three Credit Hours
Open to juniors and seniors.
A continuation of English 405. A consideration of great literary traditions from the Fifteenth Century to the present with emphasis on their contributions to English literature. Lecture: three hours.

407, 408. *Principles of Literary Criticism in English* — Six Credit Hours

Open to departmental seniors and to any student who has completed two full-year courses in English, or the equivalent, above the sophomore level.

A study of the classical tradition in criticism, the Renaissance restatement, and neoclassic developments; and of the development of modern criticism. Lecture: three hours.

409. *Writing Poetry* — Three Credit Hours

Open to juniors and seniors.

Analysis of and practice in writing poetry; varied in accordance with the experience and expectation of the students registered. Lecture: three hours.

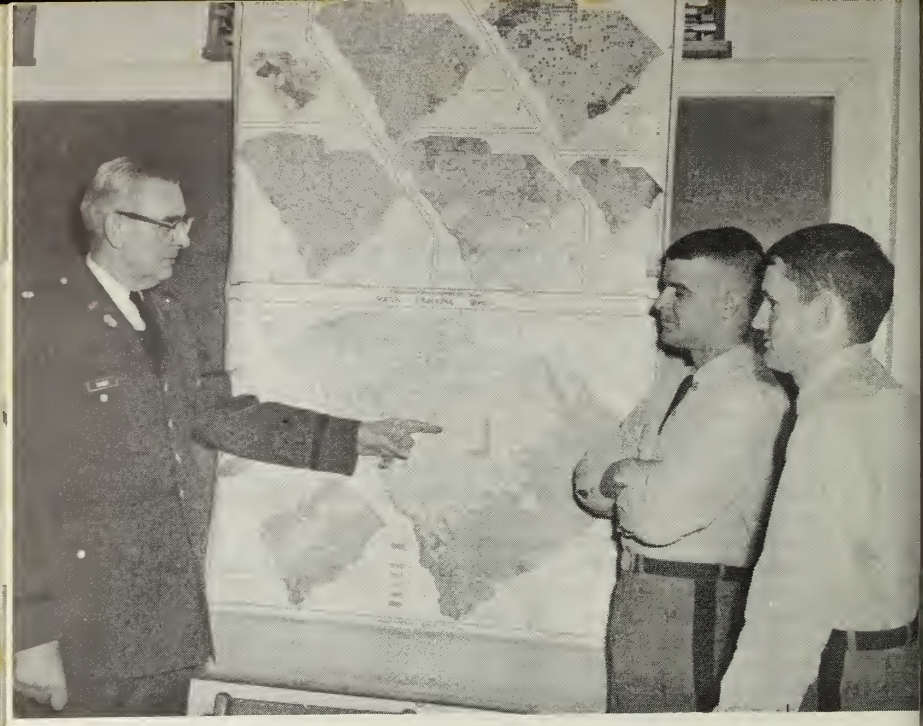
*410. *Writing the Short Story* — Three Credit Hours

Open to juniors and seniors.

Analysis of short stories, followed by practice in writing them. Lecture: three hours.

*420. *Senior Essay* — Two Credit Hours

Required of all seniors as a prerequisite to graduation. See page 81.



DEPARTMENT OF HISTORY

Professors: Anger, Phillips
Associate Professors: Lee, Martin
Assistant Professors: Fortunato, Goodhart, Willis, Coussons, Schwint, Addington, Hanckel

The Department of History endeavors to give to the student an acquaintance with and an appreciation of our heritage; to enable him to see causes and effects, contrasts and comparisons as shown in the development of civilization; to give him an accurate knowledge of the history of his own country and to familiarize him with its institutions and the democratic ideals which have influenced American life; to acquaint the student who elects this subject with the standard works in its various fields and to prepare him to pursue graduate and professional studies.

A graduate with a major in history will, with his twenty-one hours of selected electives, be well-qualified not only for the responsibilities of citizenship but will also have the broad background necessary for a successful career in business, law, the armed services, the church, and certain fields of science.

Students electing history as a major are required to take in addition to the freshman survey (History 101, 102) the following courses:

History 201, 202; History 301, 302; and a total of twenty-one semester hours selected from the junior and senior courses offered by the department. They are also required to take two years of a modern language, Economic Foundations of Modern Life, American Government, and either International Politics or Constitutional Law. Juniors majoring in History are required to take either History 303, 304; History 305, 306, or History 313, 314. For further details see the tabulation of the curriculum for a History Major, page 89.

Courses marked with an asterisk (*) *are usually offered in alternate years or on demand.*

101, 102. *A Survey of American History* Six Credit Hours
Required of all freshmen except majors in physics and mathematics. Required of sophomores majoring in physics and mathematics.
Survey of American history from the period of discovery to the present; a brief treatment of the colonial period, followed by a more detailed study of such subjects as the causes of the Revolution, the framing of the Constitution, the development of political parties, the sectional conflict, economic progress and problems, and foreign relations; special emphasis placed on understanding the nature of American democracy and the role of the United States in world affairs from 1789 to the present.

201, 202. *A Survey of European Civilization since 1500* Six Credit Hours
Required of sophomores majoring in history, political science, education, English, and modern languages. The historical background of contemporary civilization, emphasis on movements and developments of enduring significance; the evolution of national states; the growth of representative and democratic institutions of government; the development of modern capitalism; the origins of current international conflicts; the progress of science, art, and literature.

301, 302. *History of England* Six Credit Hours
Required of all History majors.
A survey of English history from earliest times to the present. Special attention is given the formation of the English people, the continuity of their social and political experience, and the English legacy to Americans. The institutional development of parliament, monarchy, legal system and local government is constantly viewed against the changing background of society and economic activity.

303, 304. *The United States since* 1900 Six Credit Hours
American social, cultural, economic, and political development in the twentieth century; emphasis on the increasing importance of the United States in world affairs and significant political and economic changes.

*305, 306. *European History since* 1870 Six Credit Hours
A study of the development of liberalism and democracy in Western Europe; international politics and the revival of imperialism; the origins of World War II; efforts toward international organization and collec-

tive security; the rise of totalitarian states and their aggression; World War II and its aftermath, the Cold War.

*307. *Studies in Biography* Three Credit Hours
The study of significant personalities in European or American history; lectures, reports, and discussion.

*309. *The American Civil War and Reconstruction* Three Credit Hours
Emphasis on the political, economic, and social developments of the period, with some attention to the military aspects of the war.

*310. *The Era of the French Revolution and Napoleon* Three Credit Hours
A survey of the Old Regime and the causes of the Revolution, followed by an examination of the principal events of the period, stressing the innovations of the Revolutionary governments, the causes of Napoleon's rise to power, his achievements in France and in Europe, the reasons for his eventual downfall.

*311. *The Old South* Three Credit Hours
The political, social, and economic characteristics of the South before 1860 with emphasis on the role of this area in the national scene.

*312. *The New South* Three Credit Hours
The political, economic, and social development of the South since 1877; emphasis on contemporary regional problems and their impact on American life.

*313, 314. *Social and Intellectual History of the United States* Six Credit Hours
A survey of American social and cultural developments and their relationship to each other. Emphasis will be upon the intellectual aspects of American life and their impact upon society as a whole.

*315, 316. *History of Modern Warfare* Six Credit Hours
A survey of the development of modern warfare, emphasizing the impact of social, economic, political, and technological forces upon military theory and practice.

*401, 402. *History of American Diplomacy* Six Credit Hours
Seniors majoring in History are required to take either History 401, 402, History 403, 404 or History 409, 410.
An examination of the heritage, fundamental principles, and progressive development of American foreign policy from colonial times to the present.

*403, 404. *Latin American History* Six Credit Hours
Survey of the economic, cultural, and political development of Latin America; study of the nations as a unit, with special attention to the individuality of each; concentration by each student in his collateral reading on some one country.

*405, 406. *History of Colonial America* Six Credit Hours
Seniors majoring in history are required to take either History 405,

406 or History 407, 408.

A more detailed treatment of the foundations of American civilization than in History 101; the motives of colonization, the evolution of self-government, the extension of the frontier; economic, social, and religious life, the causes of the Revolution, the problems of the Confederation.

*407, 408. *History of the Ancient World and the Middle Ages* Six Credit Hours

The Ancient World in the first semester, the Middle Ages in the second: a survey of the history of the Greeks, the Romans, and the people of the Middle Ages, their wars and political institutions, their economic and social life, their cultural and intellectual achievements.

*409. *History of the Far East in Modern Times* Three Credit Hours

A survey of the Far East from the first contacts with the West to the present.

*410. *History of Modern Russia* Three Credit Hours

A survey of Russian society, politics, and culture from the early modern era to the present. Intensive treatment beginning with the Great Emancipation through the twentieth-century revolutions and the consolidation of Soviet rule.

*411. *South Carolina History* Three Credit Hours

A survey of the political, economic, social, and intellectual developments of South Carolina from its discovery to the present, with emphasis on the relation of the state to the South and to the nation.

420. *Senior Essay* Two Credit Hours

Required of all seniors as a prerequisite to graduation. See page 81.

Geography

309. *Elementary Geography* Three Credit Hours

An introductory course dealing primarily with the elements and principles of geography. Familiarity with important global features and locations is stressed. Topics include: maps, oceans, atmosphere and winds, climate (elements and patterns), landforms, soils and agriculture, mineral resources and industry.

310. *Cultural Geography* Three Credit Hours

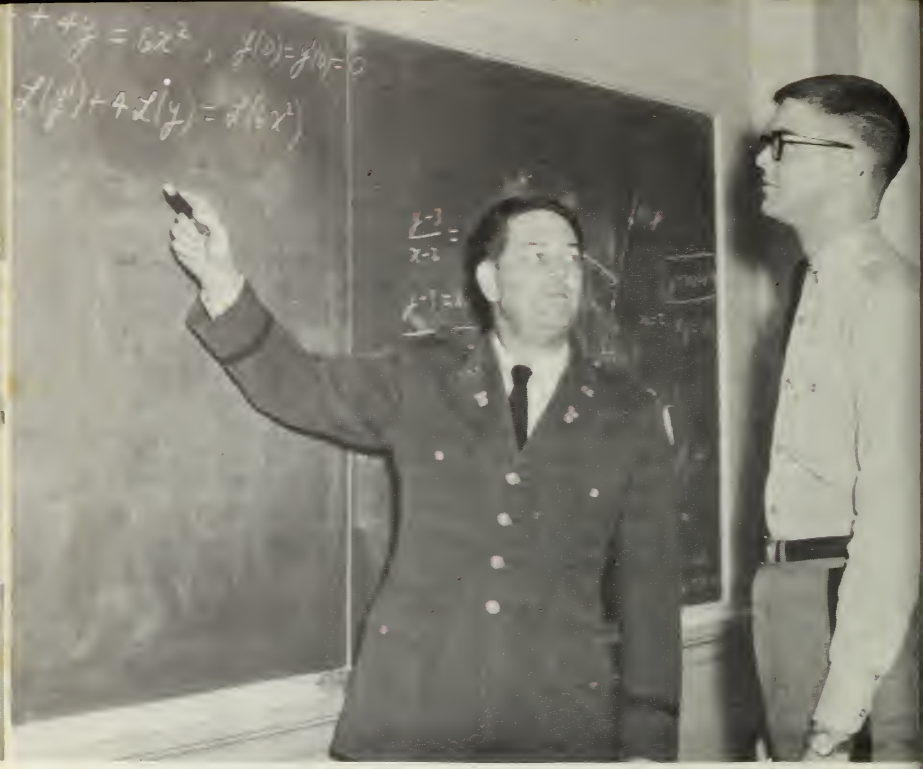
An application of geographic principles to human activities in selected regions of the world. Cultural patterns are contrasted and compared in the light of the physical environment.

311. *Economic Geography* Three Credit Hours

The geographic foundations and distribution of economic activities in different parts of the world.

312. *Historical Geography* Three Credit Hours

A survey of geographic influences in prehistory and history. Various theories of geographical determinism are evaluated against the backdrop of historical realities.



DEPARTMENT OF MATHEMATICS

Professors: Dye, Reves, Hutchison
Associate Professors: Saunders, Sutton, Thompson
Assistant Professors: Brown, Hull, Crumley, Kirkland, Hill, McIntyre, Ingraham, Roughton

The stated purpose of The Citadel is the training of young men for service to their country as civilian leaders or as officers in the armed forces, if the need arises. To meet the demands of this modern scientific age such a program of education must include basic studies in chemistry, physics, and mathematics. To this end all students at The Citadel are required to take at least one year of mathematics. In the science and engineering majors two or more years of mathematics must be scheduled.

There is today an ever-increasing demand for college graduates trained in mathematics, on the part of government and industrial laboratories as well as schools and colleges. At The Citadel, students who elect mathematics as a major field of study have 36 semester hours of electives in related fields of their choice and 44 semester hours of mathematics. The mathematics courses required in the junior

and senior years are Advanced Calculus (321-322), Senior Essay (420), and 18 additional semester hours of courses numbered in the three and four hundred range with the exception of Number Theory (309) and History of Mathematics (310). These two courses may, however, be taken as electives.

The customary mathematical techniques are developed in all the courses of the department, but students are encouraged to obtain results through reasoning processes rather than by stereotyped use of formulas.

101, 102. *Fundamental Mathematics* Six Credit Hours
Required of all Arts freshmen.
A modern treatment of the essential topics of college algebra and trigonometry including the elementary theory of sets, vectors, and matrices.

119. *College Algebra and Trigonometry* Five Credit Hours
Required of all Physical Science and Engineering freshmen.
A modern treatment of the essential topics of college algebra and trigonometry including the elementary theory of sets, vectors, and matrices.

121, 122. *Analytic Geometry and Calculus* Ten Credit Hours
Required of all Physical Science and Engineering majors.
A unified treatment of the theory and applications of plane analytical geometry and the differential and integral calculus of functions of one variable.
Prerequisite: Mathematics 119 or Mathematics 101, 102.

220. *Intermediate Calculus* Five Credit Hours
Required of all Chemistry, Physics, Mathematics, and Engineering majors.
The analytical geometry of three dimensions; the differential and integral calculus of functions of two or more variables; differential equations of the first order and degree; linear differential equations; with constant coefficients; miscellaneous differential equations; applications.
Prerequisite: Mathematics 121, 122.

Starred courses are offered in 1965-66.

*303, 304. *Modern Algebra* Six Credit Hours
Structure of the number system; integral domains; fields; groups; vector spaces; matrices; determinants.
Prerequisite: Mathematics 220.

305, 306. *Modern Geometry* Six Credit Hours
Special topics from axiomatic geometry; Euclidian geometry; projective geometry; non-Euclidean geometry; metric projective geometry; topology.
Prerequisites: Mathematics 119 or 101, 102.

307, 308. *Projective Geometry* Six Credit Hours
Homogeneous point and line coordinates; principles of quality; cross ratio; projective forms; the conics and their properties.
Prerequisite: Mathematics 220.

*309. *Number Theory* Three Credit Hours
The Euclidean Algorithm; prime and composite integers; elementary Diophantine equations; Pythagorean triples; Euler's phi-function; congruences; Euler-Fermat theorems; exponents and primitive roots; quadratic residues.
Prerequisite: Freshman Mathematics and the approval of the department head.

*310. *History of Mathematics* Three Credit Hours
A survey of the development of mathematics from the time of the ancients to the present; analysis of causes for the retardation of the advancement of mathematics in different centuries; selected readings from significant areas of mathematics used to show the contributions of mathematics to the development of science.
Prerequisite: Freshman Mathematics and the approval of the department head.

*321, 322. *Advanced Calculus* Six Credit Hours
Required of all Physics, Mathematics, and Electrical Engineering majors.
Vector calculus; Bessel's functions; partial differential equations, Fourier series; LaPlace transforms; functions of a complex variable.
Prerequisite: Mathematics 220.

403, 404. *Functions of a Complex Variable* Six Credit Hours
Real and complex numbers; differentiation and integration of a function of a complex variable; mapping; the linear fractional transformation; infinite series; properties of single-valued and multiple-valued functions.
Prerequisite: Mathematics 321, 322.

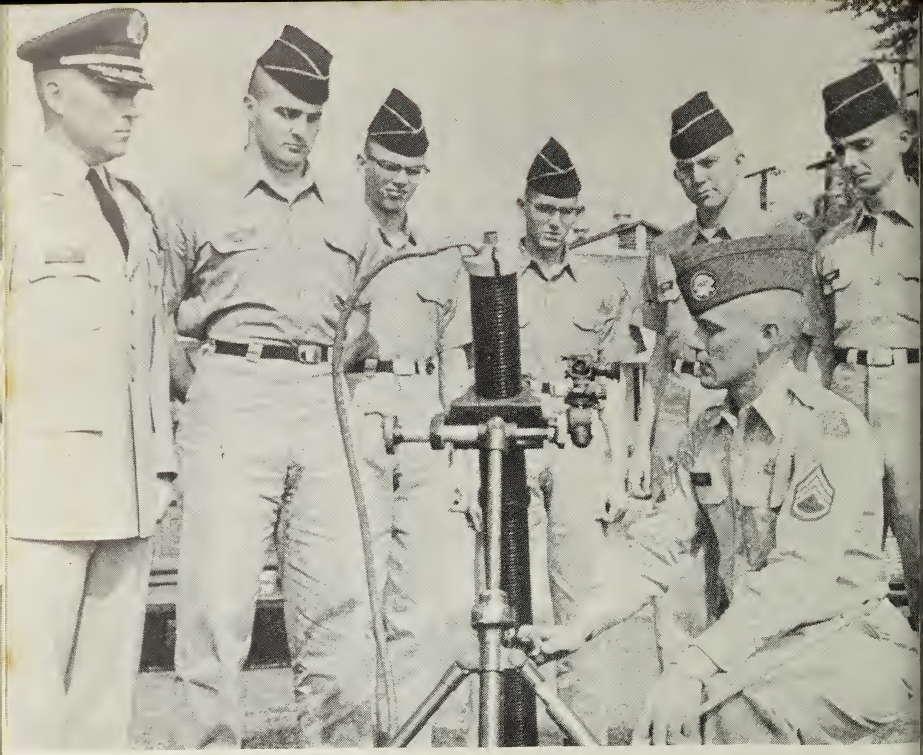
405, 406. *The Mathematical Theory of Statistics* Six Credit Hours
Frequency distribution; averages; measures of dispersion; correlation; probability; the normal curve; theory of sampling.
Prerequisite: Mathematics 321, 322.

*407, 408. *Numerical Analysis* Six Credit Hours
Roots of equations; calculus of finite differences; interpolation formulas; numerical differentiation and numerical integration; numerical solution of ordinary differential equations; simultaneous equations and determinants.
Prerequisite: Mathematics 321, 322.

*409, 410. *Topology* Six Credit Hours
Networks; maps; Jordan Curve theorem; sets; metric spaces; topological spaces; connectedness; compactness.
Prerequisite: Mathematics 303, 304.

415, 416. *Reading Courses* Three Credit Hours Each
Directed reading on assigned topics in mathematics; weekly conferences with the instructor; a term paper.
Prerequisite: Exceptional ability and background, and approval of the department head.

*420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 81.



DEPARTMENT OF MILITARY SCIENCE

Professor: Webb

Associate Professor: Rawlins

Assistant Professors: Fahy, Savas, Thompson, Patterson, Wiegand, Simmons, Gaw, Harkins

The Department of Military Science is an academic department of The Citadel. It organizes and supervises all Army ROTC activities on the campus.

The objective of Army ROTC at The Citadel is to provide military science instruction to all Army cadets and to produce junior officers having the qualities and attributes necessary to become successful reserve or regular officers of the United States Army. Although all students are required by school regulations to take four years of ROTC, not all cadets earn the privilege of being commissioned an officer in the Armed Forces.

The four-year General Military Science course of Army ROTC is designed to offer instruction in subjects common to all branches of the Army. The first two years comprise the *Basic Course,* and the last two years, including a six-week summer encampment, comprise the *Advanced Course.* Cadets with prior ROTC training should make this information known to the Military Department as soon as possible so that credit, if appropriate, may be granted.

Formal Enrollment Requirements

The basic requirements for formal enrollment in Army ROTC are shown below. These must be fully met before the Professor of Military Science can consider a cadet for formal enrollment in the Army program. Cadets who do not meet these requirements are not entitled to ROTC allowances and will be ineligible for a commission.

Be a citizen of the United States.

Be physically qualified under Department of the Army standards. For the Basic Course, a statement by The Citadel Surgeon that a cadet can perform "normal military duties" usually suffices. An Army-administered physical examination, required for formal enrollment in the Advanced Course, is given to all third classmen (sophomores) in the spring. Waivers of physical defects are granted only in exceptional cases, and then only by authority of the Department of the Army. Any degree of uncorrected vision is acceptable provided visual acuity is correctable to 20/40 in one eye and 20/70 in the other eye, to 20/30 in one eye and 20/100 in the other eye, or to 20/20 in one eye and 20/400 in the other eye. Both eyes must be free from any disfiguring or incapacitating abnormality and from acute or chronic disease.

Maintain satisfactory academic standards with his class.

Maintain a satisfactory leadership rating. This rating is determined by the Commandant of Cadets, the Professor of Military Science, and other appropriate Citadel officials.

Be of good moral character. Cadets convicted by civil or military court for offenses other than minor traffic violations are not eligible for formal enrollment without specific approval of the Department of the Army. A cadet may apply for a waiver of conviction, provided the offense was non-recurring and did not involve moral turpitude.

Pass ROTC Qualifying Examination. This examination is administered during the third-class year. Failures cannot be formally enrolled unless a waiver is received, and these are granted only in exceptional circumstances. No make-up examinations are authorized.

Pass Physical Fitness Test. The physical fitness tests administered by the Physical Education Department will be used as basis for determining eligibility for enrollment. The fundamental requirement is that any cadet competing for an Army Commission must meet the physical fitness requirements established for active-duty officers.

Advanced Course

Formal enrollment in the Advanced Course involves both signing a contract with the Government and enlistment in the U. S. Army Reserve. Under the terms of the contract, the signer agrees to accept a commission if it is offered and to serve on active duty for two years or six months, depending upon the needs of the Army. (Current legislation at the time of publication of this bulletin has temporarily suspended the six-month period of active duty, but this may be reinstated

at a later date.) As long as the cadet continues his enrollment in the advanced course, he will not be required to participate in Reserve training nor will he be ordered to active duty for training or active duty. If as a result of willful evasion of the terms of his advanced course contract he does not complete the Senior Officers' Training Corps program or if he completes the course of instruction and declines to accept a commission when offered, the cadet may be ordered to active duty in his enlisted grade for not more than two years. Disenrollment by reason of physical or academic deficiency is not construed as "willful evasion," and in such cases, disenrolled cadets will not be ordered to active duty under the terms of their contract.

Army Aviation Flight Training

A small number of first classmen (seniors), selected after a highly competitive physical, mental, and leadership evaluation, will be permitted to participate in the Army Flight Training Program as part of their ROTC instruction. This program is extracurricular and serves to motivate students to seek a career in Army Aviation, and also serves as a program for screening applicants for Army Aviation training. The program consists of approximately 71 hours of ground and flight instruction. Students may be awarded the Federal Aeronautical Agency private pilot's certificate upon completion of this training.

Distinguished Military Students

Certain cadets who, at the start of their first-class (senior) year, have clearly demonstrated outstanding leadership and academic ability, along with the highest moral traits, may be selected as Distinguished Military Students. These students have the option of applying for direct appointment in the Regular Army.

Course of Instruction

101, 102. *Military Science I, First Year Basic* — Two Credit Hours
Organization of the Army and ROTC (10 hours)
Individual Weapons and Marksmanship (15 hours)
U. S. Army and National Security (15 hours)
Special Presentations on Appropriate Military Subjects (20 hours)
Leadership Laboratory (150 hours)

201, 202. *Military Science II, Second Year Basic* — Two Credit Hours
American Military History (29 hours)
Counterinsurgency Operations (1 hour)
Map and Aerial Photograph Reading (15 hours)
Introduction to Operations and Basic Tactics (15 hours)
Leadership Laboratory (150 hours)

301, 302. *Military Science III First Year Advanced* — Three Credit Hours
Military Leadership (16 hours)
Military Teaching Principles (20 hours)
Branches of the Army (24 hours)
Small Unit Tactics (42 hours)

Communications (8 hours)
Counterinsurgency Operations (5 hours)
Pre-Camp Orientation (5 hours)
Leadership Laboratory (140 hours)
Supplementary Field Tactical Training is conducted as local conditions permit.

401, 402. *Military Science IV* Three Credit Hours
Second Year Advanced

Operations (50 hours)
Logistics (20 hours)
Army Administration (15 hours)
Military Law (15 hours)
Role of the U. S. in World Affairs (8 hours)
Review of Map Reading (2 hours)
Service Orientation (10 hours)
Leadership Laboratory (150 hours)
Troop Movement (5 hours)
Motor Transportation (5 hours)

The techniques of Army Administration (14 hours)
The role of the officer in unit administration to include familiarization with Department of the Army publications.

The Methods of Administering Military Justice (14 hours)
Introduction to the fundamental concepts of military justice in the Armed Forces of the United States, as provided for in the Uniform Code of Military Justice.

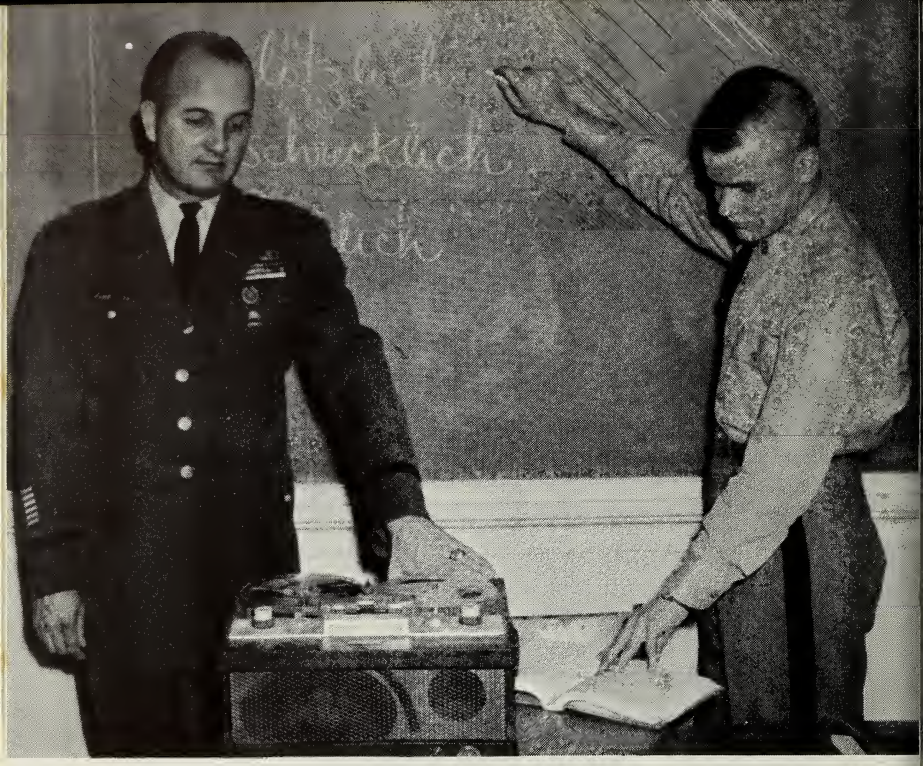
The Role of the United States in World Affairs (8 hours)
Preparation of the future officer for active service by an orientation in geographical and economic factors, their influence on the division of peoples into nations, and the causes of war.

Service Orientation (10 hours)
Customs of the Service; conduct and code of an officer; responsibilities and obligations of an officer; career management program as it pertains to the officer and advanced principles of leadership.

Map Reading Review (2 hours)
Leadership Laboratory** (153 hours)

* An orientation on insurgency movements using the history of the growth to acquaint the students with the nature and causes in order that he may understand the methods of combating the movement. The role of the U. S. Army in counterinsurgency operations. In the junior and senior years case histories are studied in various geographical areas.

** Provides for leadership training, drill experience, and the development of essential characteristics of leadership such as initiative and self confidence, through progressive training in leadership, drill, and command. Further provides a thorough indoctrination in military courtesy and customs of the service.



DEPARTMENT OF MODERN LANGUAGES

Professors: Van D'Elden, Van de Luyster
Associate Professors: Brand, Smith
Assistant Professors: Pappas, Brown, Wuerth, Warren
Instructors: Pieper, Frohlich

A student majoring in Modern Languages must attain a thorough knowledge of one language, spoken and written, a reasonable degree of competence in a second, and a good understanding of the important writers, the literary developments, and the cultures which these languages represent. Upon successful completion he is prepared to do graduate work in the language chosen for his major work.

In a world being rapidly drawn together by improved means of communication, yet with its parts still sharply differentiated in language, customs, and ways of thinking, the ability to communicate directly iwth speakers of other languages has become increasingly important. A premium is placed upon it by industry and in government service.

The four modern languages offered by the department are among the most important because of the wealth of material, both literary and scientific, which has been published in them, and because of the fact that most educated individuals, no matter what their mother tongue may be, are fluent in either English or one of these four.

Students who elect languages as their major field must satisfactorily complete seven courses in language, including, for one language, at

least two courses above the intermediate level. They must complete the Survey of either French Literature, German Literature, or Spanish Literature. The exact sequence of their courses may vary according to the language chosen for their major work and the point at which their college work in languages was begun. Students wishing to take a language course as an elective may take any course for which they have done the prerequisite work.

In courses above the intermediate level, the work of each semester is a unit, and credit will be given for its successful completion.

French

101, 102. *Elementary French* Six Credit Hours
For students who elect French and have entered The Citadel with less than two units of the language.
The reading and writing of simple French; dictation; elementary conversation with drill in pronunciation; elements of French grammar.

201, 202. *Intermediate French* Six Credit Hours
For students who have completed French 102, or have entered The Citadel with two or three units of the language.
Reading from authors of the nineteenth and twentieth centuries; composition and conversation based on the reading material; grammar review to correct faults in usage.

301, 302. *Introductory Survey of French Literature* Six Credit Hours
Open to students who have completed French 202.
A general survey of French Literature from its beginnings to the present time; extensive reading, reports, discussion in French.

The following courses will be given when there is sufficient demand, and according to the wishes and needs of the students.

401, 402. *French Composition and Conversation* Six Credit Hours
Open to students who have completed French 302, or who have completed French 202 with a grade of A or B.
Composition and conversation with grammar review when needed, to produce fluency and accuracy in the use of spoken and written French; some use of an elementary form of the *explication de textes.*

403, 404. *Eighteenth Century French Literature* Six Credit Hours
Political and philosophical thought in the eighteenth century, traced through the writings of Montesquieu, Voltaire, and Rousseau; the beginnings of Romanticism as shown in Rousseau and other writers; lectures in French; collateral readings and reports.
Prerequisite: French 302.

405, 406. *The Classical Period of French Literature* Six Credit Hours
The literature of the seventeenth century, that of France's most distinctive and in many respects finest contribution to the world's literature and culture; special attention given to the plays of Corneille, Racine, and Molière.
Prerequisite: French 302.

407, 408. *Nineteenth Century French Literature* Six Credit Hours
French literature from Chateaubriand to Zola and Anatole France; the Romantic, realistic, and naturalistic movements, with special emphasis on Balzac, Hugo, and Flaubert; lectures in French, discussion, outside reading.
Prerequisite: French 302.

German

101, 102. *Elementary German* Six Credit Hours
For students electing German and having entered The Citadel with less than two units of the language.
Pronunciation and the elements of German grammar; written and oral exercises; translation of simple German into English.

201, 202 *Intermediate German* Six Credit Hours
Completion and review of elementary grammar; reading of texts from German literature; conversation in German.
Prerequisite: German 102 or two entrance units.

203, 204 *Scientific German* Six Credit Hours
For students taking the chemistry, physics, or pre-medical course.
First-year grammar study continued; translation of texts in various sciences; special stress on sentence structure and word-building.
Prerequisite: German 102 or two entrance units.

301, 302 *Introductory Survey of German Literature* Six Credit Hours
Open to students who have completed German 202.
A general survey of German Literature from its beginnings to the present time; extensive reading, reports, discussion in German.

303, 304 *German Literature of the Nineteenth Century* Six Credit Hours
Representative work of outstanding novelists and dramatists, with discussion of the literature of the period; assigned reading and reports.

401, 402. *Goethe's Faust* Six Credit Hours
Goethe's greatest drama, *Faust,* studied in connection with his life and with regard to his message today; its genesis and growth; translation of Part I and selections from Part II; *Faust das Puppenspiel* and its relation to Goethe's *Faust;* lectures, reading, and reports.

Spanish

101, 102. *Elementary Spanish* Six Credit Hours
For students electing Spanish and having entered The Citadel with less than two units of the language.
Essentially a drill course in the reading, writing and speaking of simple Spanish.

201, 202 *Intermediate Spanish* Three Credit Hours
A course to develop further the general understanding of the language, oral and written. Texts are literary or general.
Prerequisite: Spanish 102 or two entrance units.

301, 302 *Introductory Survey of Spanish Literature* Six Credit Hours
Open to students who have completed Spanish 202.
A general survey of Spanish Literature from its beginnings to the present time; extensive reading, reports, discussion in Spanish.

303, 304. *Spanish-American Literature* Six Credit Hours
Leading works from Mexico and Central and South America studied, with both individual and class reading.
Prerequisite: Spanish 202.

401, 402 *Spanish Literature of the Golden Age* Six Credit Hours
Literature of the late sixteenth and seventeenth centuries, the age producing the characters of Don Quixote and Don Juan; a study of the works of Cervantes, Lope, Tirso, Calderon, and others.
Prerequisite: Spanish 202.

Russian

101, 102. *Introductory Russian* Six Credit Hours
A course designed to introduce the student to the nature of the language, the fundamentals of the grammar, and a basic vocabulary.
Prerequisite: Permission of the head of the department.

201, 202. *Intermediate Russian* Six Credit Hours
A continuation of Russian 101, 102, with emphasis on vocabulary building, the development of reading skill, and conversation.
Offered when demand justifies.

All Modern Languages

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 81.

Classical Languages

Offered when demand justifies.

101, 102. *Elementary Greek* Six Credit Hours
Fundamentals of the Greek language.
Recommended for students preparing for the study of medicine or theology.

201, 202. *Intermediate Greek* Six Credit Hours
Selections from Xenophon or the New Testament.
Prerequisite: Greek 101, 102.

101, 102. *Elementary Latin* Six Credit Hours
Latin grammar and translation. Course dependent upon the background of the student.
Recommended for pre-law students.

201, 202. *Intermediate Latin* Six Credit Hours
Translation from Latin prose writers.
Prerequisite: Latin 101, 102 or two entrance units.

DEPARTMENT OF PHYSICAL EDUCATION

Professor: Dellastatious
Assistant Professors: Feigl, Turner, Cook

The purpose of the Department of Physical Education is threefold:

(1) Professional Physical Education Program: Prepare and qualify Physical Education majors for secondary-school teaching in the fields of physical education, athletics, and a selected minor.

(2) Required Physical Education Program: Organize and administer a four-year required physical education program for the Corps of Cadets.

(3) Intramural Program: Organize and administer a voluntary intramural program for the Corps of Cadets during their free time.

The Physical Education Major

The Department of Physical Education-Intramural Athletics requires the following physical education courses for its physical education majors:

201. *Introduction to Physical Education* Three Credit Hours
An introductory survey of physical education; historical background, nature, scope, and function of physical education; its aims, objectives, and principles.

204. *Individual and Dual Sports* Three Credit Hours
Teaching methods with applied techniques in archery, badminton, handball, and wrestling.

301. *Personal and Community Health* Three Credit Hours
A body of knowledge from the biological and social sciences which is essential for sound decisions in health maintenance and conducive to proper sense of health values for the individual and the community.

303. *Basketball* Two Credit Hours
Comparative study of defensive and offensive systems of team play; development of basic individual skills and techniques; teaching and coaching; rules and officiating. Lecture: one hour a week; laboratory: two hours a week.

308. *Gymnastics and Tumbling* Two Credit Hours
Theory and practice of gymnastics, tumbling, and developmental activities with respect to teaching methods, skills, and the conduct of gymnastic meets. Lecture: one hour; laboratory: two hours.

401. *Organization and Administration of Physical Education* Three Credit Hours
Organization: delegation of authority and responsibility; use of the democratic method; formation of teams, tournaments, and leagues; program aims and objectives; curriculum building; course construction; lesson planning.

Administration: selection, purchase, and care of equipment; office policies and systems; budgeting in finances; publicity; team and game management.

404. *Individual Physical Education* Three Credit Hours
Principles and practices in the conditioning and care of athletics. Prevention and care of injuries, first aid, kinesiological analysis of the body, corrective exercise for the physically handicapped student.

405. *Health Education* Three Credit Hours
Organization and administration of a school health program with specific attention to methods and techniques of health instruction.

406. *Spring Sports* Three Credit Hours
Theory and practice in the fundamentals of teaching and coaching baseball, track, golf, and tennis. Administration and execution of meets and tournaments. Lecture: two hours; laboratory: two hours.

407. *Football Theory* Two Credit Hours
Analysis and evaluation of offensive and defensive tactics, formations, and plays; individual techniques and fundamental skills in position play; teaching materials and methods; coaching; rules and rule interpretations.

412. *Tests and Measurements in Physical Education* Two Credit Hours
The place and importance of tests and measurements in the physical

education teaching process; the use of scientific measurement n available in physical education.

414. *Kinesiology* Two Credit Hours
The anatomical and mechanical analysis of functional posture and motor performance (physical skills), for the purpose of understanding and recognizing normal and faulty movement as based on the lastest available scientific information.
Prerequisite: Biology 303.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 81.

Required Physical Education

All cadets are required to participate actively in the required physical education program during the freshman and sophomore years. A second classman is required to meet his RPE obligation through a prescribed voluntary program. Seniors who fail the fall physical fitness test are required to participate in the RPE program.

FOURTH CLASS (*Freshmen*):

1. *Swimming Test*
   Prior to registration, all freshmen must take a swimming test which consists of swimming 100 yards without stopping. Throughout this test a swimmer must execute proficiently any two fundamental swimming strokes and proper breathing techniques. All freshmen who fail the swimming test will be assigned to a beginning swimming class for a five week period some time during the freshman year. If at the end of this period a cadet fails the test a second time, his name will be put on a probational swimming roll. He will then have until the fall of his junior year to pass the swimming test. A re-test can be arranged at any time during a semester by contacting the Physical Education Department for an appointment. If a cadet does not meet this requirement, he will be required to enroll in a special swimming class during his junior year.

2. *RPE Activities*
   All fourth classmen must enroll and participate in four of the following activities:
   A. Wrestling
   B. Gymnastics
   C. Track and Field
   D. Physical Conditioning (required of all fourth classmen)
   E. Cadetball
   F. Survival Swimming (required of all fourth classmen unless they can present active Red Cross Instructors certificate)
   G. Basketball

   Two classes a week.

THIRD CLASS (*Sophomores*):

All third classmen must enroll and participate in four of the following activities:

1. Archery
2. Badminton
3. Bowling
4. Fencing
5. Golf
6. Handball
7. Judo
8. Paddle Rackets
9. Scuba Diving
10. Tennis
11. Volleyball
12. Weight Training

If a cadet wishes to repeat one of the above activities the second semester, he may do so provided he is not classified as skilled in that particular activity, and there is room for a repeater. One class a week.

SECOND CLASS (*Juniors*):

Second classmen will not be required to attend formal physical education classes, but they will be required to participate in one of the following programs:

1. *Intramurals* - Juniors must participate in two fall and two spring intramural activities; one of the two for the respective term must be a team sport, such as basketball, flag football, and softball, or a ladder tournament. Each activity must be scheduled on a ladder or round-robin basis.
2. *Clubs* - A junior must belong to and participate in one of the following clubs: Judo, Gymnastics, Fencing, Sailing, or Sky Diving. A minimum of three hours a week must be spent to classify him as an active member.
3. *Varsity Athlete* - A junior must be a member of a varsity team sponsored by the Athletic Department (minimum of eight weeks participation required). Cadet who participates in Spring Sports only must meet fall intramural or club requirements - (two activities).
4. *RPE Instructor* - A junior who serves as an assistant instructor in the RPE program for two hours a week for one semester will meet his Junior RPE requirement. Restricted to physically qualified students who are academically proficient.

FIRST CLASS (*Seniors*):

All seniors will be required to take a physical fitness test each fall. If they fail it, they will be given four months to prepare for the second test. If they fail the second test, they will be assigned to a special physical conditioning class. Once the test is passed, the cadet is excused from further participation in the RPE Program.

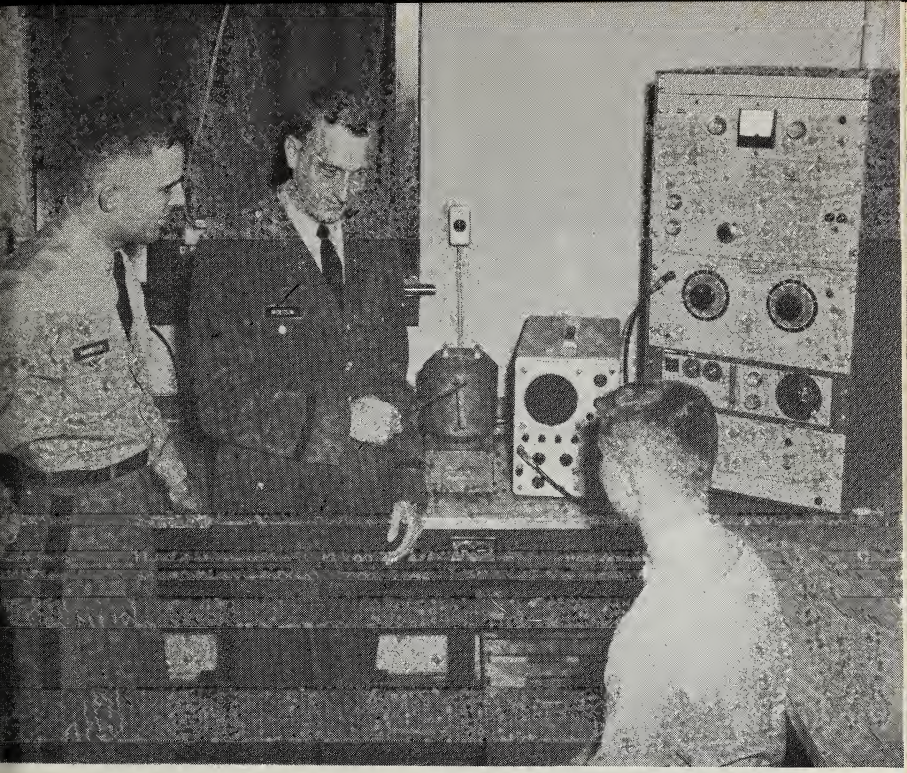
Intramural Program

The intramural program is voluntary and consists of seventeen different activities. These activities range from individual to team sports, and lead to physical and mental fitness. Some team activities have

been separated for freshman and upperclass participation to give all cadets an opportunity to engage in the more vigorous competitive sports.

Participation will lead not only to the desired leadership qualities, but also to the development of "esprit de corps." The wide variety of activities gives a cadet ample opportunity to develop necessary skills that will enable him to participate in an activity many years after graduation.

Fall	*Winter*	*Spring*
Flag football	Bowling (freshmen)	Handball (singles)
Volleyball	Basketball (upperclassmen)	Swimming
Tennis	Wrestling	Softball
Handball (doubles)	Basketball free throw	Sigma Delta Psi
Bowling (upperclassmen)		Gymnastics
Basketball (freshmen)		Weight lifting
Steeplechase		
Table tennis		
Track		



DEPARTMENT OF PHYSICS

Professors: Anderson, Hanson
Associate Professor: Johnson
Assistant Professors: Allen, Bailey, Meeks, Voegeli, Byrne, Darmody
Instructor: Barkley

It is the purpose of the Department of Physics to offer to all students at The Citadel a fundamental course in one of the basic physical sciences, and to offer to students specializing in other departments such advanced courses in physics as are necessary to meet their needs. To students taking their major work in the department, it offers a program of courses sufficient to enable them to enroll as graduate students in full standing at the leading universities, or to fill positions as physicists in the government service and in industrial laboratories.

The rooms of the department are located in the east wing of Bond Hall. On the first floor are two large laboratories for advanced physics courses, one of which is air-conditioned, a photographic dark room, and a machine shop for instrument repair and maintenance. A room containing D.C. generators and the main electric switchboard is also located on this floor. On the second floor are a large air-conditioned lecture room seating one hundred ten, four smaller lecture rooms, two of which are air-conditioned, one classroom, and two laboratories for

elementary physics. Additional elementary laboratories are located on the third floor. At all lecture desks and laboratory tables, electric power, both A.C. and D.C., of the required voltage is available from direct current generators or the commercial A.C. power supply. Gas, water, and compressed air outlets are also available in all lecture rooms and laboratories. Distribution panels, connected with the main electric switchboard, are located in the advanced laboratories. The lecture rooms and laboratories are conveniently arranged and well equipped with modern apparatus to carry out the department policy of frequent student experimental work and extensive lecture demonstrations.

The department sponsors a Student Section of the American Institute of Physics to provide extracurricular activities and training for physics students.

The college requirement of one year of physics in the sophomore class can be met by Physics 201, 202 in all courses of study. Physics 203, 204 does not satisfy the requirement in the chemistry, mathematics, physics or engineering electives. The objectives, methods, and to some extent the content in these two courses are different. Accordingly, it is recommended that Physics 201 be followed by Physics 202 even by those students who change to a different course of study during the first semester of the sophomore year.

Students taking physics as their major work are required to take all courses offered by the department for physics majors. In addition they are required to take Mathematics 321, 322; German 201, 202. For valid reasons the study of German may be postponed to the junior or senior year. Physics majors are advised to choose their electives from the advanced courses offered in the Department of Chemistry and the Department of Mathematics.

201, 202. *Elementary College Physics* Eight Credit Hours
Required of all sophomores majoring in engineering, mathematics, chemistry or physics. The less mathematical portions of mechanics, heat, electricity, sound and light covered with no assumption of prior knowledge of physics; laboratory work of about twenty-eight individual quantitative experiments based on fundamental principles; instruction in the use of the slide rule, which is required equipment.
Lecture: three hours; laboratory: two hours.
Prerequisite: Math. 121.

203, 204. *Introduction to College Physics* Eight Credit Hours
Required of all sophomores who do not take Physics 201, 202.
A course similar to Physics 201, 202, adapted primarily to the needs of students who expect to take no additional courses in the physical sciences and including recent developments in physics bearing directly on everyday life; laboratory periods devoted to individual experiments

performed by the students, experiments conducted by the instructor, solution of problems, or showing of technical films.
Lecture: three hours; laboratory: two hours.
Prerequisite: Math. 102 or 119.

301, 302. *Advanced General Physics* Six Credit Hours
Required of all Physics Juniors; open to others.
A continuation of Physics 201, 202, covering in a more advanced and mathematical manner portions of mechanics, heat, electricity, and magnetism not included in the earlier course. Lecture: three hours.
Prerequisites: Physics 202; Math. 122.

303, 304. *Laboratory Physics* Four Credit Hours
Required of all Physics Juniors; open to others.
A study in the laboratory of many of the topics considered in Physics 301, 302; about forty-five more advanced experiments than those in Physics 201, 202 involving the use of most of the standard instruments of physical measurement. Laboratory: four hours.
Prerequisite: To be preceded or accompanied by Physics 301 or 302.

305, 306. *Physics for Premedical Students* Six Credit Hours
Required of all Premedical Juniors.
Designed to supplement the introductory course and meet the requirements in physics for admission to the best medical schools; laboratory work of about thirty individual quantitative experiments dealing with mechanics, molecular physics, heat, electricity, light, and radioactivity. Lecture: two hours; laboratory: two hours.
Prerequisite: An introductory course in college physics.

307. *Geometrical Optics* Three Credit Hours
Required of all Physics Juniors; open to others.
Principles of geometrical optics and optical instruments; reflection, refraction, and dispersion in theory and experiment. Lecture: two hours; laboratory: two hours.
Prerequisites: Physics 202; Math. 122.

308. *Physical Optics* Three Credit Hours
Required of all Physics Juniors; open to others.
The general equations of wave motion; interference, diffraction, polarization, and double refraction studied both theoretically and experimentally. Lecture: two hours; laboratory: two hours.
Prerequisites: Physics 307; Math. 122.

310. *Heat and Thermodynamics* Three Credit Hours
Required of all Physics Juniors; open to others.
Kinetic theory of gases and transport phenomena, thermodynamics of gases, Maxwell-Boltzmann statistics, thermoelectricity and theory of thermal radiation.
Lecture: three hours.
Prerequisite: Physics 301.

401. *Modern Physics* Three Credit Hours
Required of all Physics Seniors; open to others.
The background of modern atomic physics, Maxwell's equations for electromagnetic waves, charged atomic particles, photoelectricity, X-rays, special theory of relativity, atomic spectra and atomic structure.
Lecture: three hours.
Prerequisites: Physics 302, 308; Math. 220.

402. *Nuclear Physics* Three Credit Hours
Required of all Physics Seniors; open to others.
A continuation of Physics 401 to include natural radioactivity, isotopes, artificial radioactivity and nuclear disintegration, nuclear reactions, detection of charged particles and radiations, cosmic rays and fundamental particles. Lecture: three hours.
Prerequisite: Physics 401.

403, 404. *Advanced Laboratory Physics* Two Credit Hours
Required of all Physics Seniors.
A course accompanying Physics 401 and 402. Experiments of an advanced nature especially in atomic and nuclear physics to include electron emission, determination of fundamental constants, conduction of electricity through gases, X-rays, radioactivity, detection, counting, and analysis of nuclear radiations. Laboratory: two hours.

405. *Advanced Physics* Three Credit Hours
Senior Elective.
An introduction to modern physics and the principles of mechanics, heat, electricity, and light essential to its understanding; lectures and demonstration experiments on many topics covered more completely in Physics 308 and 401. Lecture: three hours.
Prerequisites: Physics 301, 302.

406. *Electronics* Five Credit Hours
Required of all Physics Seniors.
Characteristics of electron tubes and transistors and their use as rectifiers, detectors, amplifiers, and oscillators; a course designed to introduce students to the use of electron tube and transistor circuits in the field of measurements.
Lecture: three hours; laboratory: four hours.
Prerequisite: Physics 413.

407. *Mechanics* Four Credit Hours
Required of all Physics Seniors.
Selected topics in mechanics extending the treatment given in Physics 301 and using the methods of vector calculus; kinematics, gravitational theory, oscillations, Euler's equations, Hamiltonian and Lagrangian functions, principle of least action, and introduction to fluid dynamics and Laplace's equation.
Lecture: four hours.
Prerequisites: Physics 301; Math. 220.

413. *Electricity and Magnetism* Five Credit Hours
Required of all Physics Seniors.
The electrostatic field and its effect on matter, the properties of magnetic fields and magnetic materials, electromagnetic effects, electrical transients, periodic currents. Lecture: three hours; laboratory: four hours.
Prerequisites: Physics 302; Math. 220.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 81.

DEPARTMENT OF POLITICAL SCIENCE

Professors: Kline, Hodges
Assistant Professors: Fairchild, Moreland, Kingston, Grunes, Keeton, Arcilesi, Spar

The curriculum of political science at The Citadel is planned to give the student a background in the political, social, and economic developments of the modern world. It seeks an understanding and interpretation of tendencies, a breadth of view, and a spirit of scientific inquiry into those fields which will qualify its majors for admission to graduate and professional schools.

While this program undertakes to provide a broad liberal education, it is especially designed as basic preparation for the administration of business enterprises and governmental services both foreign and domestic, and to provide a program for pre-law students. The head of this department is the designated pre-legal curriculum adviser for students interested in the study of law.

The Political Science Department has long been aware of the need for men trained in international affairs and encourages students to prepare for careers in the Foreign Service and Intelligence activities. This course of study has been reviewed by the State Department. Students

entering the Armed Services have also found it useful in their military training and valuable to a military career.

A student who selects political science as his major course of study is required to take Political Science 201 (American National Government) and 202 (State and Local Government) in the Sophomore year. For the requirements in the junior and senior years, see page 94. Two years of a modern language are required. There are fifteen hours of electives which may be chosen according to the individual's requirements and interests, subject to the approval of this department.

201. *American National Government* Three Credit Hours
Required of all Political Science Sophomores; open to others.
The origins and development of the American constitutional system; relations between national and state governments in the American federal system; the political process, with emphasis upon election procedures, public opinion, and pressure groups and political party activity; the individual and his government; the institutional organization of the national government; the national government in action.

202. *State and Local Government* Three Credit Hours
Required of Political Science Sophomores. Open to others.
The historic evolution of state governmental and constitutional systems; the role of the states in the American constitutional system; the institutional organization of state governments; the relationship between states and their political subdivisions; the organization and activities of local governmental units.
Prerequisite: Polit. 201.

301, 302. *International Law and Organization* Six Credit Hours
Required of Political Science Juniors. Open to others receiving permission of the instructor.
A survey of international law as developed through treaties, customs, usages, and decisions of national and international tribunals; a study of the League of Nations, the United Nations, and the international machinery for the settlement of international problems and disputes.

303. *American Foreign Relations* Three Credit Hours
Required of Political Science Juniors. Open to others receiving permission of the instructor.
A study of the organization of the American government for the conduct of foreign relations; the institutions and elements in the making of foreign policy; emphasis on the important problems and developments of the post-war years.

304. *American Parties and Politics* Three Credit Hours
Required of Political Science Juniors. Open to others.
An analysis of the dynamics of American politics, with particular emphasis upon the factors entering into the formation of public opinion, the role of pressure groups, and the operations of the party system.

305, 306. *Public Administration* Six Credit Hours
Required of Political Science Juniors. Open to others.
A study of the characteristics of public administration at all levels; the principles and practices of organization; the role of leadership and its process; the management of personnel and finance; the effects of the regulatory process upon administration; the problems of securing administrative responsibility.
Prerequisites: Polit. 201, 202.

307, 308. *Economic Foundations of Modern Life* Six Credit Hours
Required of Political Science Juniors. Open to others.
Basic economic concepts. National income, diminishing returns, population and progress, organization of business enterprise, social aspects of corporation finance and the securities market, monopoly and monopolistic prices, public utilities regulation, risk, insurance, speculation, money and banking, prices, labor problems and public policy, wages, interest, rent, profits, international trade and finance.

312. *Municipal Government* Three Credit Hours
Open to juniors and seniors.
A study of the legal status of municipalities, their administrative organization; personnel and finance problems; planning and zoning; safety administration; regulatory and management problems.

401, 402. *Constitutional Law* Six Credit Hours
Required of Political Science Seniors. Open to others receiving permission of the instructor.
A study of the underlying and basic principles of the Constitution as reflected in the leading decisions of the United States Supreme Court.

403. *Government Finance* Three Credit Hours
Required of Political Science Seniors. Open to others receiving permission of the instructor.
An analysis of the scope and methods of governmental taxing, spending, and borrowing; current financial problems of all levels of government; implications of alternative fiscal problems.
Prerequisite: Polit. 307, 308.

405, 406. *International Politics* Six Credit Hours
Required of Political Science Seniors. Open to others receiving permission of the instructor.
An analysis of the development and distribution of power among nations; the geographic, demographic, economic, political, psychological, and military bases of national power; emphasis on the problems and policies of the major powers.

407, 408. *Political Theory* Six Credit Hours
Required of Political Science Seniors. Open to liberal arts seniors.
Major theoretical writing from Plato to Thomas Hill Green; emphasis on a comparison of basic ideas and on the relationship between theories and contemporary problems.

409. *Far Eastern Affairs* Three Credit Hours
Open to juniors and seniors.
A survey of the Far East and its problems; a study of China and Japan in terms of power elements; emphasis on role of China and Japan in American foreign policy.

410. *Southeast Asian Affairs* Three Credit Hours
Open to juniors and seniors.
A study of the development of the area and the problems of the countries involved; emphasis on the importance of the area to the United States and its role in American foreign policy.

411. *Comparative Government* Three Credit Hours
Open to juniors and seniors.
An analysis of the structure and operation of the basic political institutions of the major powers; emphasis on divergent approaches to their common problems.

412. *Administrative Law* Three Credit Hours
Open to seniors with adequate background in history, economics, and political science.

414. *Latin American Affairs* Three Credit Hours
Open to juniors and seniors.
A survey of the Latin American areas; a study of the power elements and related problems; emphasis on the relationships and importance of the area to the United States.

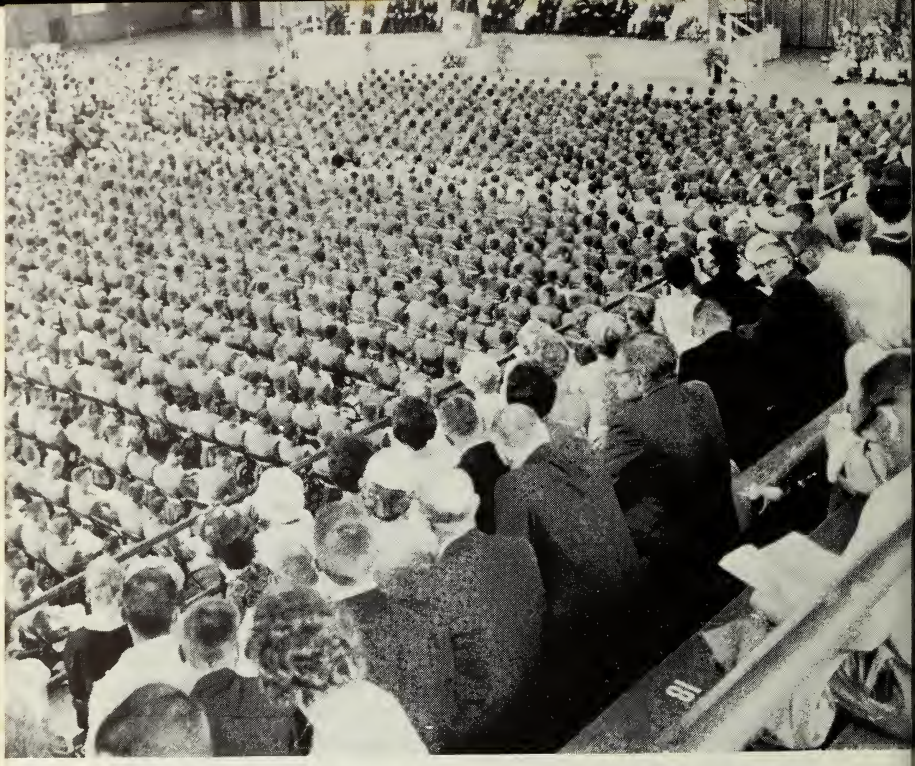
415. *Russian Affairs* Three Credit Hours
Open to juniors and seniors.
An analysis of the geographic, demographic, economic, political, psychological, and military bases of Soviet power. Emphasis on the objective techniques, and operations of Soviet foreign policy.

416. *National Policy and Administration* Three Credit Hours
Open to juniors and seniors.
Analytical and critical survey of the process of formulating and administering basic domestic policy; the role and influence of special interest groups; the problems of the President and Congress in formulating general interest programs.

418. *Middle Eastern Affairs* Three Credit Hours
Open to juniors and seniors.
A survey of the Middle East; a study of the power elements and related problems; emphasis on the role of the area in American foreign policy.

422. *Public Opinion and Propaganda* Three Credit Hours
Systematic analysis of the political process incorporating the technique of opinion survey design and analysis; the analysis of voting behavior; and the study of the mechanisms for influencing opinion through the use of modern techniques of propaganda.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 81.



GREATER ISSUES COURSE

In order to associate Citadel students with outstanding leaders of thought and action in the free world, General Mark W. Clark inaugurated in 1954-55, his first full year after assuming the presidency of The Citadel, a Greater Issues Course. Its purpose is to bring to The Citadel speakers of national and international reputation. Each is invited to discuss some segment of public affairs with which he is especially familiar. The Greater Issues Course is part of the curriculum of every Citadel student and has proved of outstanding interest and value.

In 1964-65, the Greater Issues series again brought to The Citadel distinguished individuals who discussed first hand the issues that disturb and motivate today's world. Among them were Dr. Billy Graham, noted evangelist; Eugene M. Zuckert, Secretary of the Air Force; and Claire Booth Luce, playwright, ex-congresswoman, ex-ambassador, and author.

Presidents Dwight D. Eisenhower and Herbert Hoover, Francis Cardinal Spellman, Bruce Catton, Gen. Maxwell Taylor, and Admiral of the Fleet, Earl Mountbatten of Burma are examples of the more than seventy gentlemen who have appeared as Greater Issues speakers in previous years.

COMPUTER CENTER

In recent years many important applications for high-speed digital computers have been found in practically all fields of human endeavor. The Computer Center was established for the purpose of offering training in this increasingly important field.

The depth and extent of a student's activities in this field is largely dependent on his field of study and on his own initiative and interest. The language for communicating with the computer is taught in a one credit hour course in the sophomore year. Computer programs written by the students in this course are processed by Computer Center personnel or by student assistants.

Upon completion of the computer programming course and a brief period of instruction in computer operation a student may process his own programs on the computer.

Equipment: The computer is an IBM 1620 central processing unit with a 1311 disk file which provides a working memory of 20,000 positions and a random access memory of 2,000,000 positions. Peripheral equipment consists of two keypunch machines, a sorting machine, and a 150-line-per-minute printer. This equipment is in addition to an IBM 1401 computer which is used for administrative data processing and for training students majoring in Business Administration.

The year begins for new cadets when they first pass through the sallyport of Padgett-Thomas Barracks and report for duty at The Military College of South Carolina. The next few days during Plebe Orientation Week are busier than the new fourth classmen ever believed possible. Selected members of the upper classes who are designated as the training cadre lead the new cadets through the initial rigorous training and supervise every moment of their day.

During this period, the newcomer receives the necessary training to prepare him to take his place in The South Carolina Corps of Cadets. Each day is filled with a variety of activities: the new Plebe receives classes in the customs and traditions of The Citadel, the College and Cadet Regulations, the Cadet Honor System, military courtesy, wearing of the uniform, room arrangement, close order drill, physical training, and the Army and Air Force ROTC programs. Additionally, he accomplishes the numerous administrative tasks to prepare him for cadet life and the academic year to include assignment to his company and room, equipment and clothing issues, fittings for uniforms, conferences with his mililtary and faculty advisors, and class registration for the fall semester. By the end of the first week, the new cadet is no longer a stranger to The Citadel. He is beginning to feel like a cadet; and yes, look like one too. He takes pride in his accomplishments for, even at this early date, he has gained familiarity with military courtesy and discipline through constant practice under the critical eyes of his training cadre. He is well on the way toward mastering the fundamentals of dismounted drill, and he has stood his first formal inspection in ranks.

He's ready for a change of pace and a moment of relaxation now, and he has the opportunity following chapel services on Sunday. A class outing takes place at The Citadel's beautiful beach house on The Isle of Palms. He will long remember the pleasure of this day for it is his first chance to evade the seemingly constant supervision of his squad leader, to relax from the burden of continually striving for perfection, and to meet his new classmates and enjoy with them the fellowship of the occasion.

With the return of the other upper classmen from summer furlough, the academic year gets underway. Now, the new cadets begin to realize what their four years at The Citadel will be like. As they become immersed in their studies, they begin to appreciate the need for the proper budgeting of their time and the necessity of developing good study habits. The days soon begin to fall into a routine, but never one that permits boredom, for in the classroom as well as in the other facets of their daily life there are always new challenges to be met and additional responsibilities to be assumed.

In early fall the new cadets have progressed sufficiently far in their training to officially join the Corps of Cadets. It is a memorable oc-

casion for the new cadet, and he will always remember the special retreat ceremony at which his class was formally presented to The Corps.

But all is not work for the Plebe. There are numerous activities in which he will participate: intramural and Corps squad athletics, tea dances and formal hops, and, with the advent of football season, the thrill of watching the "Bulldogs" play in Johnson Hagood Stadium on a Saturday afternoon. Soon it is Parents' Day and he has the opportunity to show Mom and Dad how well "their cadet" has progressed. It is a moment of pride for all concerned. In a few short weeks comes Christmas leave and a period of well-earned relaxation with family and friends.

The year is far from over, but the Plebe is well prepared for the second semester. He is fully adjusted to the demands of cadet life, he is confident in his own ability, and he shares in the proud heritage of the Corps of Cadets. The excitement of Graduation Week in the spring means different things to the different classes, but to the Plebe it means the end of a difficult but rewarding year and the achievement of a new status: that of a Citadel upperclassman.

TYPICAL WEEKDAY SCHEDULE

Morning:

6:15	First Call for reveille
6:30- 7:10	Breakfast hour
7:10	Sick Call
7:10- 8:00	Unscheduled time (Polcie of barracks and preparation for class)
8:00-11:50	Class
12:10- 1:00	Dinner hour

Afternoon:

1:00- 2:50	Class
3:00- 3:50	Drill and physical training
4:00- 6:00	Intramural and intercollegiate athletics, study time, parades, and extracurricular activities
6:10- 7:00	Retreat and supper hour
7:00- 7:30	Unscheduled time
7:30- 9:30	Call to quarters (Evening study period)
9:30-11:00	Continuation of study time
11:00	Taps. Late lights authorized to some groups for study purposes

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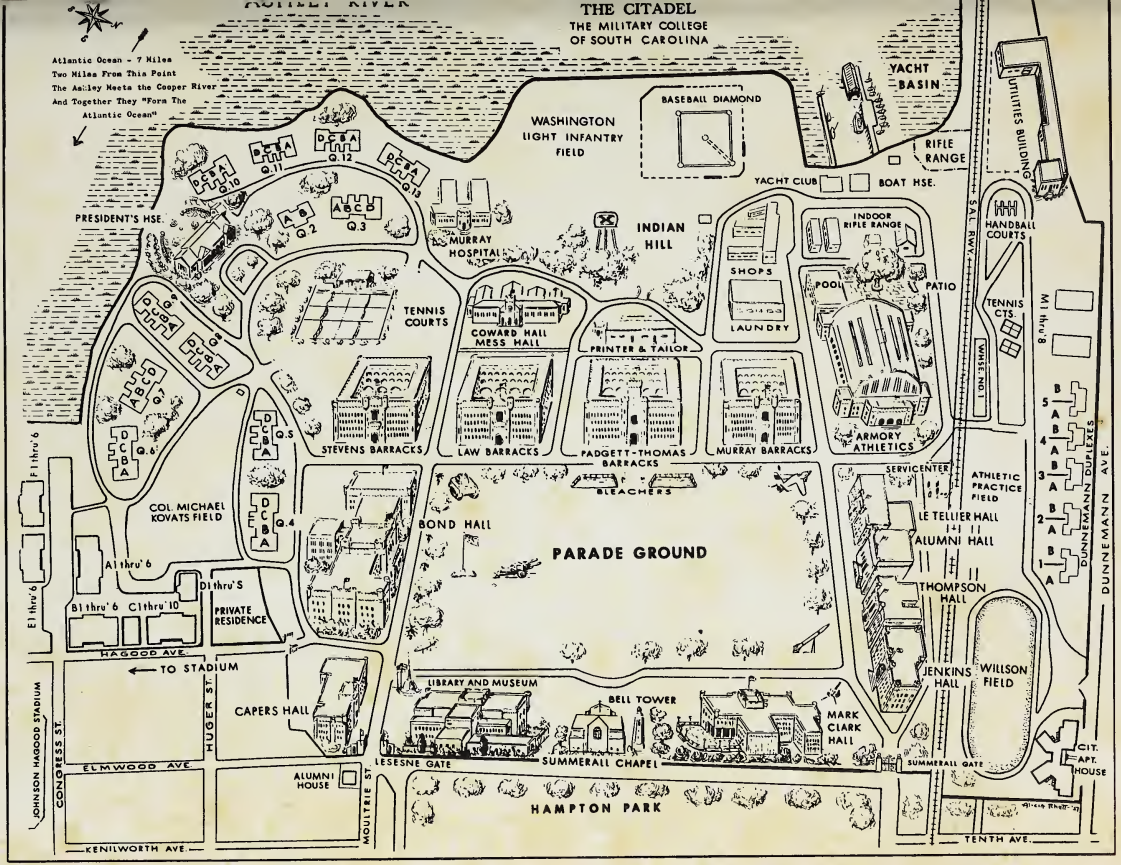
THE CITADEL
THE MILITARY COLLEGE
OF SOUTH CAROLINA
Atlantic Ocean - 7 Miles
Two Miles From This Point
The Ashley Meets the Cooper River
And Together They "Form The
Atlantic Ocean"
WASHINGTON
LIGHT INFANTRY
FIELD
BASEBALL DIAMOND
YACHT BASIN
RIFLE
RANGE
UTILITIES BUILDING
YACHT CLUB
BOAT HSE.
PRESIDENT'S HSE.
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HALL
WILLSON
FIELD
LIBRARY AND MUSEUM
BELL TOWER
CAPERS HALL
MARK
CLARK
HALL
LESESNE GATE
SUMMERALL CHAPEL
SUMMERALL GATE
CIT.
APT.
HOUSE
ALUMNI
HOUSE
HAMPTON PARK
TENTH AVE.
ELMWOOD AVE.
KENILWORTH AVE.
JOHNSON HAGOOD STADIUM
CONGRESS ST.
HUGER ST.
MOULTRIE ST.
DUNNEMANN AVE.
DUNNEMANN DUPLEXES
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